



Tip #48 Three in a Row

Here's a common question:

"I want to put three LCR speakers in my entertainment unit. Is it ok if I lay the LR speakers down on their sides? I'd rather not have that 15" or 20" between shelves if the LR speakers are standing vertically."

The short answer is. "No." It's not a good idea to lay LR speakers that are designed to be vertical on their sides.

As we discussed in Tech Tip #42, horizontally-arrayed drivers (what you get with an LR speaker on its side) have poor side-to-side ("horizontal" or "lateral" in engineering-speak) dispersion. That will limit the so-called "sweet spot" and restrict both listener and speaker placement. (See figure 1.)

An Atlantic center channel speaker (with its raised tweeter design and closely-spaced woofers) has far superior lateral dispersion than an LR speaker turned on its side. (See figure 2.)

Here's a much better idea:

If you want to use three speakers on shelves for your front LCR speakers—but you want to keep consistent shelf spacing—use three identical Center Channel speakers. For example, use three 4400 C's instead of two 4400 LR's sideways and a 4400 C in the middle.

This accomplishes three really important things:

1. It gives you three identical speakers across your front LCR stage. That's the acoustic ideal, the perfect goal. Even though the 4400 LR is very, very close to the 4400 C, it's not identical. Three of the same speakers have identical tonal balances and radiation patterns (identical sound coverage/

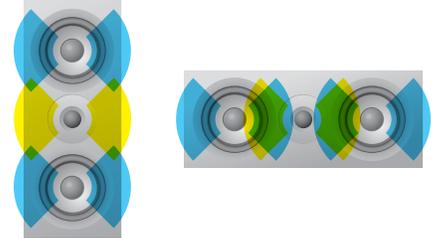
dispersion patterns). This means that your sonic image remains perfectly seamless as sounds pan from left-to-center-to-right.

2. Since all Atlantic center channel speakers have our exclusive rocker base mounting, you can place the speakers on a high shelf if you choose and 'aim' the speakers down to the listening area.

3. They all look the same and your shelf spacing can be the same. It's not only a win acoustically, it's a win aesthetically too. (See figure 3.)

Yes, an Atlantic LR—mounted vertically—has even wider horizontal dispersion than an Atlantic C, so if you're planning on stand- or PED-mounting, the LR is a better choice. But three C's are probably the best way to go when shelf-mounting all three LCR's.

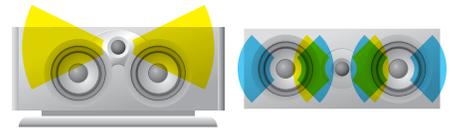
Figure 1



Vertical drivers:
Wide horizontal
dispersion

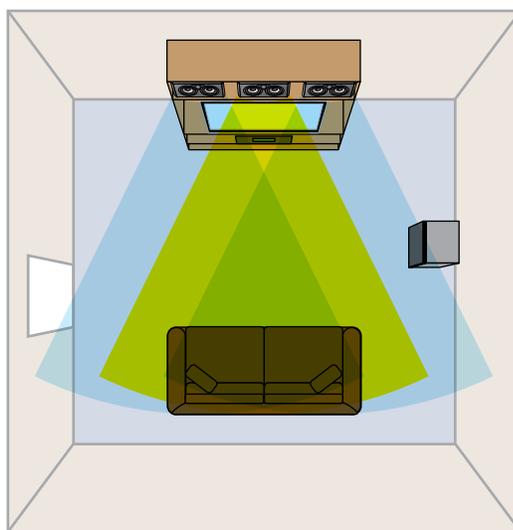
Horizontal drivers:
Restricted horizontal
dispersion

Figure 2



4400 C has much better horizontal dispersion than a 4400 LR on its side

Figure 3



Three Atlantic centers as LCRs delivers perfectly identical LCR sound and great coverage

Other Tech Tips:

Tip 44: Power Response

Tip 45: Impedance

Tip 46: Series vs. Parallel Wiring

Tip 47: Go Wireless