

## The New Parasound C-Series C 70 A Two-Channel Speaker Breakthrough!

We've received numerous requests to develop a two-channel version of our popular C 65. Installers often specify two-channel ceiling speakers to make their jobs easier when installing speakers in zones where both left and right channels must be routed to only one speaker.

Parasound's design goal was to make a C 70 two-channel speaker which would sound identical to our C 65. This was easier said than done! We soon learned why *none* of our competitor's two-channel speakers sounds as good as a single channel speaker.

## Here's the Problem:

- 1. Dual woofer voice coils weigh more than a single voice coil; this weight reduces the woofer's sensitivity and its frequency response and tonal balance vary drastically, depending on if one or two channels are connected.
- 2. Mid and high frequencies coming from dual (or triple) tweeters reinforce and cancel each other, causing very jagged and unpleasant frequency response peaks and dips. Tonal quality varies immensely as you move in front of, or beneath, the speakers.

In other words, we didn't find *any* two-channel single speakers that measure or sound as good as the C 65. So we found a unique way for the C 70 to solve this problem.

To make a C 70 two-channel speaker sound like a C 65, we use an actual C 65 driver and crossover. Parasound's breakthrough is that the two input terminals connect to a special precision *audio transformer* with two 8 ohm primary windings and a single 8 ohm secondary winding that connects to a single C 65 crossover. Signals from the left and right amplifier channels are safely blended to mono in this unique transformer.

## Here are the C 70's advantages:

- 1. Its load is always a gentle and consistent 8 ohms to each amplifier channel.

  Other two-channel speaker's impedance is halved when both channels are driven.

  This increases amplifier distortion, reduces its dynamic headroom, increases its operating temperature, and shortens its operating life.
- 2. The C 70 level stays the same whether you connect one channel or both channels. Now you can install two-channel C 70s and single-channel C 65s in an installation and know their levels will all match. The output levels of other brands of two-channel speakers will always be lower (one channel connected) or higher (both channels connected).
- 3. Excellent frequency response and "point source" dispersion are identical to the C 65. With other two-channel speakers, response is ragged and radiating patterns are full of "hot spots" and "nulls" that make uniform coverage nearly impossible.