Subject: Compensation components require specific R1 and R2 instead of an L-Pad Posted by Wayne Parham on Sun, 07 Apr 2002 21:51:55 GMT View Forum Message <> Reply to Message

The crossover filter sections would probably be fine, but the L-Pad isn't. The ratios of R1 and R2 provide specific damping for the filter that gives the response curve we're looking for when we use compression horn tweeters, and using an L-Pad doesn't allow for this.Response curve of the crossover's tweeter circuitThe response curve shown above is characteristic of the tweeter circuit

shown on the crossover chart distributed with each of the crossover schematics, midrange attenuation values of 6dB to 21dB are given. In each case, the response from the crossover frequency up for the first couple octaves is flat, with 6dB/octave augmentation above that. This response curve is required to compensate for the tweeter. So the moral of the story is that the R1/R2/C1 compensation components are carefully chosen to provide a curve that exactly conjugates the compression driver's power response. That's why I suggest that L-Pad's not be used, and that the values shown on the crossover document be used instead.