Subject: Choosing the correct amps to run my Pi Speakers
Posted by dutchswan0311 on Sun, 04 Mar 2012 16:23:15 GMT
View Forum Message <> Reply to Message

The following represents the settings that I am attempting to achieve with powering the Pi speakers in our dinner theater, and the subsequent amps that I have found so far that most closely meet those stated objectives. Please chime in if you know of a better or more efficient way of going about this (or if you see something wrong with my "ohm math")

4Pi Speaker: As of now, I plan to run each of these three LCRs on their own Amp in bridged mode. The JBL Pro Cinema manual recommends doubling the RMS rating on the amp when compared to the RMS rating of the loudspeaker. As the 4Pi speakers are rated at 600W RMS @ 8ohm, I am looking for a loudspeaker that puts out 1,200W RMS in Bridged mode @ 8ohm.

1Pi Speaker (Left Surround x4 & Right Surround x4): Since each of these channels have four speakers in them, I am looking for an amp that can either (1) Provide 800W RMS in bridged mode @ 8ohm to connect to four 1pis wired in parallel and serial. This would require two amps; one to run the Left surrounds and one to run the right surrounds -or- (2) Provide 800W RMS x 2 Channels @ 8ohms to run the left and right surrounds wired in parallel and series. This would run all eight L/R Surrounds with one amp.

1Pi Speaker (Left-Rear Surround x 2 & Right-Rear Surround x 2): Provide 400W RMS x 2 @ 4ohms to connect to two 1Pis wired in parallel on each channel.

F20 Tapped Horn Subwoofer (LFE x 4): The F20 was originally designed for a 300W driver that is no longer for sale. I will be using the Dayton RSS390HF, which is rated at 500W RMS @ 4ohm. The designer of the "F20" (which represents an enclosure of 20 cubic feet) has recommended that no more than 300 watts be run through this sub, even if the driver has a higher rating. JBL Pro Cinema manual recommends matching the RMS ratings of the amp to the subwoofer at 1:1. I am not sure if this means I should utilize a 500W amp to match the driver that I never put more than 300W through, or just use a 300W amp. In any case, I am looking for a amp that can put out either 300W x 2 @ 4ohm, or 500W x 2 @ 4ohm. In either case, I would need two amps to run the four subs. THe JBL Pro cinema manual does not recommend running the subs in parallel or in series.