
Subject: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers

Posted by [MRBASSMANTROUT](#) on Mon, 22 May 2017 20:00:13 GMT

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I recently purchase two Cascade covered PA columns. When I opened the columns I found each have 6, 8 inch, 16 ohm speakers. I have to rewire them because part of the wiring is missing. My question is how to I wire the columns up to get the correct factory load? And is there a wiring diagram for me to follow? Thanks in advance for any input you might have.

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers

Posted by [Iowa Boy](#) on Mon, 22 May 2017 20:41:34 GMT

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Not sure but I would think since you have 6 speakers and all are 16 ohms...that the speakers if they are wired series/parallel will give you a 16 ohm load per cabinet. Ideally, you would like to have a 8 ohm cabinet. Now if the smaller speakers are 16 ohm and the larger are 8 ohm, they could be wired to make the cabinet 8 ohms using a variation of the series/parallel design.

Possibly your cabinet was intended to use 4 speaker cabinets with an amp to get the 4 ohm load. Google series/parallel wiring diagrams for examples on how to wire up your speakers.

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers

Posted by [MRBASSMANTROUT](#) on Mon, 22 May 2017 20:59:34 GMT

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Thanks for your response. All six speakers are 8 inch, 16 ohms. (Not the typical 4 8" and 2 12") Did Kustom have a 6 8" option for their speaker columns? All of the speakers are matched (numbers) and are stamped "Kustom" on each one. If wiring them, series/parallel gives me 16 ohms, then when I plug in both to the PA head does that give me a total 8 ohm load? Or is the total head load something else? Also, does anyone have a Kustom wiring diagram, or do use the "typical" series/parallel wiring setup? Thanks again for your comments and help.

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers

Posted by [pleat](#) on Mon, 22 May 2017 21:45:11 GMT

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Kustom did manufacture a few PA columns that were the same height as the 4x12 columns. Wiring each pair of 16 ohm speakers in series and then wiring the three pair of speakers in parallel will get you 10.66 ohms per column. With two columns wired to a K200 amp, you have 5.66 ohms total to the amp head.

I've seen a few of the 6x8" columns. I think these would be the last of the 6" speakers just before Kustom came out with the 2-12" and 3-8" 302 model columns of the K300 PA series.

Pleat

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers
Posted by [Iowa Boy](#) on Tue, 23 May 2017 00:18:55 GMT

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Well here's the deal. The Kustom amps wants a total load of 4 ohms to get the most power out of the head. So wiring them in the series/parallel will get you only 16 ohm so with two cabinets your load will only be 8 ohms. Stevem or ChicagoBill can tell you exactly how much power your going to loose with only an 8 ohm load, but the good thing is that chances are you aren't going to blow the speakers or cook your amp. Now if you wanted to get to that 4 ohm load, you could get a cabinet with (2) 16 ohm speakers and wire one speaker in parallel with one cabinet and the other speaker to the other cabinet. Now your cabinets are wired in parallel with the additional speaker and each side will now be at 8 ohms giving you a total of 4 ohms at the head. Anyway, 2 16 ohm cabinets wired in parallel gets you 8 ohms total. 4 16 ohm cabinets with two cabinets wired in parallel will get you to 4 ohms.

Google has the wiring diagram but if you like, you can private message me with your email address and I will draw it out for you. Welcome to the site as well.

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers
Posted by [pleat](#) on Tue, 23 May 2017 20:01:15 GMT

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Not all kustom amps want to see a 4 ohm total load. The K100 and K150 series want 8 ohm total loads. I don't see that the person posted exactly what amp he is using. I just assumed a K200 for example.

Each pair of 16 ohm speakers wired in series is 32 ohms. Take the three pair of 32 ohm speakers and wire the three pair in parallel will get you 10.66 ohms per column.

32 ohms = .03125. Multiply .03125 x 3 = .09375. Divide 1 into .09375 = 10.66 ohms per column.
Using two columns would be 5.33 ohms to an amplifier.

pleat

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers
Posted by [stevem](#) on Wed, 24 May 2017 13:45:57 GMT

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All of those series connected speakers make for a TON of inductance!

I would venture a guess that there is not much top end coming out of those cabinets?

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers
Posted by [Iowa Boy](#) on Wed, 24 May 2017 17:33:04 GMT

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Pleats math is correct as usual. Never assume that everything on Google is correct or gospel. So now we know that Kustom didn't build just 4,8, or 16 ohm cabinets. This particular arrangement was the odd ball....same with the (3) 15's cabinets. Regardless, series/parallel is the only way it can be wired and will work fine with 2 columns using a K200 head. AS long as all the speakers are moving in the same direction in the cabinets, you'll have no issues.

Subject: Re: Wiring Diagram for PA columns with 6 16 ohms Kustom Speakers
Posted by [Kustom_Bart](#) on Wed, 31 May 2017 21:11:33 GMT

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Oh contrare, When I was in High School we had a Kustom PA with 10" speaker columns, Pleat sold it to them and ended up with it when they sold it. We used it for our Band all through high school and to DJ with all through school as well, so we made money playing dances as a band using the schools PA, plated at parties getting all the tail and beer and donations we could get with the schools PA and DJ'd school dances and got paid using the schools PA.....what a bargain! It rocked!
