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Subject: K50 SC Combo impedance

Posted by [rodak](#) on Tue, 28 Mar 2023 18:20:53 GMT

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My K50 SC Combo has 1 12" 8ohm speaker. From an older thread I found here, it seems 8 ohms was typical for 1-speaker combos. Is the K50 amp able to safely drive 4 ohm load, or is 8 ohms the minimum?

I'm thinking of putting "speaker out/speaker in" jacks accessible from the outside. Can anyone recommend a source for small, round jack plates marked with "8 ohms" or "4 ohms"?

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Subject: Re: K50 SC Combo impedance

Posted by [pleat](#) on Wed, 29 Mar 2023 00:14:40 GMT

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the short lived K25 and the first K50's did use 16 ohm speakers. I've owned 3 of the K25's and they all came stock with 16 ohm speakers. I've owned 7 K50's and the early ones came with 16 ohm speakers. The three that I have now are around the 1969/1970 models and they came stock with either Jensen 8 ohm or CTS 8 ohm.

The amps are designed for a 8 ohm total load.

I've used the K50 as my main amp for over 20 years. Back in the 70's when I sold Kustom's, I was using the Kustom Challenger as a gigging amp. It couldn't keep up with the band I was in at the time. I called Kustom service and talked with Bob Brinkman and he suggested a simple way to either send the signal to the PA or another slave amp and speaker setup. We had a Kasino 4x10 powered speaker cab. The fix is to use a 100K ohm resistor in series to 6800 ohm resistor to ground. The leading end of the K100K goes to the speaker output + side. You take a tap from between the 100K and the 6800 ohm resistor which is the tap to the added 1/4" jack + signal to a slave amp or mixer. Ground the added jack and you're all set. Either send the signal from the K50 to the front of house PA or add a power amp and additional speaker cab to get the additional sound to the audience.

pleat

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Subject: Re: K50 SC Combo impedance

Posted by [stevem](#) on Wed, 29 Mar 2023 11:01:02 GMT

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Since it sounds like you're looking for more volume out of your K50, so you must be playing it pretty cranked up already.

If this is the case then you do not want to run it on a 4 ohm load because it will likely over heat and shut down, or worse blow the output section.

Also keep this fact in mind, if you where to have the ability to double the output wattage of your K50 it still would not be twice as loud, you would just have twice the clean head room before it did start to distort once more.

If your era model has a 16 ohm ( test out around 12 ohms ) speaker, then switching to a 8 ohm driver will get you that double amount of clean head room.

For example if you had a 10 watt amp and wanted to up grade to a amp that was twice as loud just by means of increased wattage then you would need to use a 100 watt amp, conversely if you doubled the amount of speakers you where using with the 10 watt amp, then it would be twice as loud.

Since the K50 combo amp is so small I would consider it just a head and get a 2-12 cab to gig with loaded with parallel wired 16 ohm speakers.

There is a 1/4" jack that is made which when it's wired right it will cut out the amps internal speaker and just power the external cab.

If you want to do a modified version of what Pleat posted then you can once again add a jack to the rear of the amp that will allow you to feed the preamps output signal into a separate power amp that powers whatever speaker cab you want.

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Subject: Re: K50 SC Combo impedance  
Posted by [rodak](#) on Wed, 29 Mar 2023 13:56:10 GMT  
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Thanks. No, I'm not actually trying to get any more volume out of it, I just wanted to have a speaker out jack so I could plug it into a different cab if I wanted, just to try different things. But I wanted to a) know the lowest impedance that was safe for the K50 (8 ohms, apparently), and b) have an appropriately-labeled jack so anyone using it in the future would know to not connect it to a 4-ohm load or whatever.

I had planned to see how it sounded through my 3x12 cab, but that's a no-go, as that cab is 5.67ohms.

Seems like I've seen 1/4" jack "washers" that were larger than normal, and had "8 ohms" or whatever nicely printed on them. Would be cool to have one labeled "8 ohm speaker" (that would cut out the internal speaker) and another labeled "preamp out" or something to that effect.

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Subject: Re: K50 SC Combo impedance  
Posted by [steven](#) on Wed, 29 Mar 2023 15:27:52 GMT  
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If your 3-12" cab is by a meter testing at 5.67 ohms then that's safe to run the amp on, because a 8 ohm speaker usually test at 6.5 ohms anyway.

Subject: Re: K50 SC Combo impedance  
Posted by [rodak](#) on Wed, 29 Mar 2023 19:35:01 GMT  
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The 3x12 has three 16 ohm speakers, so I think that equates to 5.3 ohms (or thereabouts - I never can remember the formula)

I could run it as long as I don't crank it, I'm sure, but I wouldn't want to do it on a regular basis.

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