Subject: Amps in series

Posted by Gplayer56 on Fri, 20 Dec 2013 00:42:08 GMT

View Forum Message <> Reply to Message

Hey all, I have two KB200 amps. I would like to run them in series. Is that possible? I know in my younger years, we had something plugged into something, running two amps... Can anyone help me out here?

Thanks!

Subject: Re: Amps in series

Posted by chicagobill on Fri, 20 Dec 2013 03:43:18 GMT

View Forum Message <> Reply to Message

Series implies that you want to run the output of one amp into the input of the second amp. Is this what you are thinking of?

There is no good way that I know of to do this safely with two Kustom amps.

Subject: Re: Amps in series

Posted by Gplayer56 on Fri, 20 Dec 2013 04:03:56 GMT

View Forum Message <> Reply to Message

Ok, if not series, parallel? I dono... I do remember the guys using two amps, and they were Kustoms .. That's all we use back then... Can two amps be run together in any fashion? Thanks!

Subject: Re: Amps in series

Posted by Kustom Bart on Fri, 20 Dec 2013 07:43:34 GMT

View Forum Message <> Reply to Message

Yes if you use a A/B/Y box and plug your output of your guitar into the output of the box and plug A into one amp and B into the other amp input and then hit the combine button and you will have signal to both amps. It is nothing more than running a Y cable from your guitar to each amp input.

However there is not a way to do what you are trying to do and get MORE POWER by hooking 2 heads together. You will get more volume and sound with 2 amps as you will have twice the speaker area moving air.

Subject: Re: Amps in series

Posted by stevem on Fri. 20 Dec 2013 11:48:51 GMT

View Forum Message <> Reply to Message

This hook up of both amps will work alot better if both amps are fitted with grounded AC cords. If one or both amps still have the stock 2 prong cable you need to make sure they are both plugged into the same wall outlet box, or power strip and both amps on / off switch is in the same position. If not you will have a 60 hz huming ground loop going on in all liklyhood.

Subject: Re: Amps in series

Posted by pleat on Sat, 21 Dec 2013 00:31:36 GMT

View Forum Message <> Reply to Message

I don't see why you can't hook two amps up together. Use one K200B as the master amp, the other K200B will be a slave amp. Hook a RCA cable from the master amps RCA jack, and connect that cable to the RCA jack on the slave amp. All signals from the master amp will be sent to the power amp of the second or slave amp. Each amp will drive it's own speaker cabinet.

The A-B/Y switching pedal is also useful if you want to send the guitar signal to either or both of the two channels of the first amp.

Pleat

Subject: Re: Amps in series

Posted by Gplayer56 on Sat, 21 Dec 2013 00:46:41 GMT

View Forum Message <> Reply to Message

Thanks all. I will try them all and see what works... Why do I want to do this?? Why Not?? More Power, More sound, It's only Rock'n'Roll and I like it!

Subject: Re: Amps in series

Posted by braud357 on Sat, 21 Dec 2013 02:32:35 GMT

View Forum Message <> Reply to Message

The RCA jack is a line out - you would have to go from the RCA jack on one head into a channel input on the other head. I tried to do this a couple of years ago with a K200B-1 and a K200B-5. Both had the grounded cord modification, and with the heads stacked on top of one another they hummed like crazy. I suppose that the transformers were unhappy being in that close proximity to each other. Hope it works for you!

Subject: Re: Amps in series

Posted by Kustom Bart on Sat, 21 Dec 2013 07:03:53 GMT

View Forum Message <> Reply to Message

Actually now that I think about it, the better way to get more power is to test your speaker cabinets

and see how many ohm's each of them are, if they are both 16 ohm cabs hook both cabs to one head to get full power from it and you would be doing the same thing as hooking two heads together.

To do this you have to make sure that you cabinets are 16ohms each as your head will only want an 8 ohm load max. By giving it an 8 ohm total load you will get the full power instead of half power when using one cabinet. to do this if it only has one speaker output use a Y jack to run a cable to each cabinet. It is the same thing as using 2 heads two heads at 100w = 200w with an 8ohm total load, one head with two 16ohm cabs hooked to it = 200w @ 8 ohm total load.

To test the ohms of the cabinet plug a speaker cable into the input jack of the cab and use a multimeter and turn it to the ohm setting and touch one probe to the tip of the jack and the other to the sleeve and it should give you a reading around 12ohms or so if it is a 16 ohm cabinet. Test them both and it they are both 16 ohm load, Y them to the output of the head and it is 200w instead of 100w with double the air moving. By using half the ohm rating you only get half power from the head.

Subject: Re: Amps in series

Posted by Gplayer56 on Sat, 21 Dec 2013 13:43:37 GMT

View Forum Message <> Reply to Message

Ok, I will try the RCA jack and see what I get... Interesting!

Subject: Re: Amps in series

Posted by sunnhead on Sat, 21 Dec 2013 15:31:00 GMT

View Forum Message <> Reply to Message

Just buy a)))400(((

-S

Subject: Re: Amps in series

Posted by Kustom_Bart on Sat, 21 Dec 2013 16:48:00 GMT

View Forum Message <> Reply to Message

Read the edit to my message a few above.

Bart

Subject: Re: Amps in series

Posted by Kustom Bart on Sat, 21 Dec 2013 16:53:20 GMT

View Forum Message <> Reply to Message

Subject: Re: Amps in series

Posted by pleat on Sat, 21 Dec 2013 19:17:05 GMT

View Forum Message <> Reply to Message

First off, I think Kustom Bart is thinking a K100-1 or K100-2 head that runs a max of 8 Ohms. The K200 series runs 100 watt into a 4 ohm total load cabinet(s).

A K400 has two K200 power amps in one chassis and each amp still runs a max of 4 ohms per amp. The only 3x15 cabinet that was offered with 4 cabinets is the K400-5 PA system that uses the siren horns. 3x15 cabs with all paper speakers, kustom offered the 400 with only two cabinets, or 4 of the 2x15 cabinets.

Getting back to the original question of running two amps together, each amp runs 4 ohms total, and we don't know what kind or impedance of the cabinets are. Impedance of the cabinets will determine output gain but that's not a question we need to be concerned with.

Addressing the post of excessive hum. If both amps power cords were changed to the 3 prong grounded cables, and the death cap removed on both. I would have to ask, were both switches wired the same when the cables were replaced, and were the power switches in the same positon when turned on. (Example both switches turned to the right) and using the same AC outlet? Were the ground side of RCA jacks making a good connection, they sometimes get corosion from lack of use.

Looking at the power amps schematic the RCA jack is tapped at a point between the first part of the power amp and that trace point goes to the speaker output further down the circuit. I'm not a amp tech, but I didn't see why it would not work. Wish I had two K200's to try it myself.

pleat

Subject: Re: Amps in series

Posted by braud357 on Sat. 21 Dec 2013 19:32:37 GMT

View Forum Message <> Reply to Message

Pleat - both amps were converted at the same time, and done exactly the same way. If you separated the amps with some distance - the hum quieted down. At the time, "stevem" told me that it was probably magnetic field from the transformers causing it. I tried the same circuit, different circuits, etc. Nothing helped, so I went in another direction. I hope that his works!

Subject: Re: Amps in series

Posted by chicagobill on Sun, 22 Dec 2013 02:59:51 GMT

View Forum Message <> Reply to Message

When two amps have grounded power cords, their chassis' are connected together via the power

cords. When you connect the two amps with an audio cable, there are two separate ground paths, which will cause what is called a ground loop.

The first thing I try is to either lift one power cord ground by using one of those 3-prong to 2-prong adapters, or by using an audio cable that has the ground connection unhooked at one end.

Subject: Re: Amps in series

Posted by Kustom_Bart on Sun, 22 Dec 2013 03:33:27 GMT

View Forum Message <> Reply to Message

You are correct Don, I am thinking bassackwards...lol