
Subject: Cab speaker impedances

Posted by [QModer](#) on Fri, 13 Feb 2004 03:30:23 GMT

[View Forum Message](#) <> [Reply to Message](#)

This might should be in another section but I'll try here first as its not really a repair problem. More of a modification thing. I know first off that Kustoms like no make that love four ohm loads. I know too that the 2x15 cabs are eight ohms. You run two of them and get the magic formula. I have a 2x12/2x10 cab and its the magic four ohms too. I have a three fifteen and its not. Its not far off but its not. Anyway what I wanna know is can I change the speakers to make it magic four ohms? Next to do that is what impedance are the speakers now? Are they 16 ohms in most Kustoms wired together to get eight ohms in each 2x15 Kustom and how are the 3x15's wired to get their odd combinations. The cab is not as loud of course as two of the 2x15's with the magic impedance match and it also seems to cause the amp head section to have to be run louder and creates a distortion in the process. Not a good situation for bass. Thanks in advance for your answers to these inquiring minds wanna know questions.

Subject: Re: Cab speaker impedances

Posted by [QModer](#) on Fri, 13 Feb 2004 03:45:01 GMT

[View Forum Message](#) <> [Reply to Message](#)

I asked about the 16 ohms but they could be four ohms speakers too wired together to get the eight ohms cabs and then two of them to make the magic four ohm formula. This may be a question for our resident Kustom tech Steve but if anyone knows please chime in.

Subject: Re: Cab speaker impedances

Posted by [pleat](#) on Fri, 13 Feb 2004 04:13:14 GMT

[View Forum Message](#) <> [Reply to Message](#)

The 3x15 cabinet impedance is 5.6 ohms. That is if the original speakers are still in the cabinet. Each speaker in the 3x15 should be 16 ohms. A stock 3x15 cabinet should give the amp a little more power than a stock 2x15 cabinet at the 8 ohm load. You may want to check the wiring and the condition of the 3x15 cabinet if it is not as loud as a stock 2x15 cabinet. With so many years passing, it would be hard to say without actually removing the back of any cabinet and looking at the wiring and speakers in a kustom cabinet. I know I have found everything from broken beer bottles, french fries, toys and I heard that one kustom collector found a church envelope with a 20.00 check in a cabinet he purchased. I would look to make sure that there is not anything wedged between the back side of the speaker cone and the basket and as long as the back is off, tighten all the mounting nuts.

Don

Subject: Re: Cab speaker impedances

Posted by [QModer](#) on Fri, 13 Feb 2004 06:07:27 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Don and thanks for the info.. It does read 5.6 ohms. The 2x15 is not louder by itself it takes two of em 2x15's to really wake up one. What if I replaced the third 16 ohm speaker with and eight ohm one. Would that make the old 3x15 read 4 ohms and be what the heads wanna see?

Subject: Re: Cab speaker impedances

Posted by [stevem](#) on Fri, 13 Feb 2004 12:47:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi.The problem with the 3-15 cab for bass is size. Its internal volume is way to small for 3-15. Ever wonder why kustom was the only brand to stuff 3-15s in one cab, now you are hearing why!!If you go to the parts express site, get 2 of the eminence model pro 15a speakers, express part number 290-422, they probily run about 90 bucks each, you will have as much SPL level as dragging around two cabs loaded with the CTS speakers at all most half the volume setting you normaly run.The original 3-15s can not be wired to get 4ohms.

Subject: Re: Cab speaker impedances

Posted by [pleat](#) on Fri, 13 Feb 2004 13:38:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

Right now each of the three 16 ohm speakers are taking 33% of the power from the amp. You could replace one of the 16 ohm speakers with a 8 ohm speaker. With all three wired in parallel, it would give you the 4 ohm load you are looking for. The problem with mixing different ohm speakers, in this case, two 16 ohm and one 8 ohm, is the 8 ohm will be taking 50% and each of the 16 ohm speakers will be taking 25% for a total of 100% of the rated power amp used. There are a lot of combinations for combining different speaker impedances to match a amp. You just have to keep in mind how the power will be distributed to the impedance of each speaker.

Subject: Re: Cab speaker impedances

Posted by [pleat](#) on Fri, 13 Feb 2004 14:13:26 GMT

[View Forum Message](#) <> [Reply to Message](#)

Kustom, I would guess was making the most of production costs. The 3x15 cabinet was used for PA with the siren horns, they also to increase the product line, it was a natural to make a 3x15 guitar and bass cabinet, and then to increase the product line even further, offer the 3x15 cabinets with JBL's, Altec's, CTS, and Jensen speakers. They did the same with the amp heads, same power amp board, same chassis, same head cabinet, only difference were the face plates and effects for each of the five K200 heads. Back in 60's we all thought bigger was louder. I do agree that a more efficient speaker will produce more sound pressure. I would be interested if anyone has done the homework to figure the internal volume for the kustom cabinets, 115, 2x12, 3x12, 2x15, 4x10, 4x12, and the 3x15 cabinets.

Keep in mind the db level between a 4 ohm and a 8 ohm cabinet is only 3db. All in all it is best to operate a amp at its rated impedance, or larger impedance to prevent overheating or amp failure.
Don

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Fri, 13 Feb 2004 23:42:20 GMT
[View Forum Message](#) <> [Reply to Message](#)

I am beginning to understand what you are saying Pleat and Steve is that the internal volume is not really enough to support 3x15's probably especially used with bass. But if I go to 2x15's shouldn't I just trade it (the 3x15) off for another 2x15 as wouldn't I be just hauling around the extra cab size for nothing then? On the other hand if I got one of the emience 15's in eight ohm how much of wattage rating should it carry and whats the part number?. After all the Kustom is only a hundred watt head and other two speakers would be still be carrying 25 percent of the load if I understand that right correct?. I could place the eight ohm speaker in the top since it would be carrying the largest load to have it right in your ear as sort of a monitor would that be good?.

Subject: Re: Cab speaker impedances
Posted by [BC](#) on Sat, 14 Feb 2004 03:38:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

Just for the record, Kustom was not the only maker of 3x15 cabinets.....they may have been the first.....but Peavey made some 3x15s also. On the subject of cabinet volume....when we all met at the Nashville guitar show in 2000, I asked Bud how he came up with the cabinet size to get such good tone.....as he motioned with his hands, his reply was, "I thought they should be about this high...about this wide and this deep" Correct or not.....I should get so lucky! BC

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Sun, 15 Feb 2004 00:46:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi BC. Yes old Ross did do a good job. I knew peavy did a huge 1x18 cab but I didn't know about the 3x15. I remember Earth doing a 3x15 though. Actually one of the reasons I didn't like peavy was the size of their 2x15 cabs. I have only seen one 250 cab and it really didn't really seem that bad to me in size. It would be nice to have one of those.

Subject: Re: Cab speaker impedances
Posted by [ET](#) on Sun, 15 Feb 2004 15:55:10 GMT
[View Forum Message](#) <> [Reply to Message](#)

wanted to jump in on the comment you made about loading the emience in the top position.. I've mixed n matched, including emience and one of the things I found was the upper section of both the 3x15 and even the 2x15s, which are narrower than the lower end, don't allow for as much cone travel and when I was really slamming the cabs (Mackie 1400) with more juice than they ever imagined from the kustom 200 heads, I would get a snap/pop sound and I thought I had a blown speaker... I moved the Emi down to the bottom position where there is the most space and the sound cleared up..both cabs were this way...now mind you, my other speakers were subwoofers too with a long throw edge, but they didn't need as much air space.. I also remember

this comment coming from Andy Ross when they were making the Krossroads bass rigs...they originally used EVs and the 15 cabs were fine, but there was just not enough air space in the 2x10 versions and they had to go to another brand speaker..get your biggest guy buster down low..you can also try not plugging the top 15 speaker at all..leave it in there, just don't hook it up...the cone will move sympathetically and you'll swear its almost on...but your amp will be happy running the pair of more capable 15s and you'll still look cool with those big towering cabs...this is all stuff that local speaker reconers and guys smarter than me have suggested and we've tried a bit of all of them and gotten varying, interesting, and sometimes great results...

Subject: Re: Cab speaker impedances
Posted by [pleat](#) on Sun, 15 Feb 2004 16:19:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

It seems like theres a lot of players favoring the 2x15 cabinets for bass, from matching speaker impedance's, internal volume of that cabinet over the 3x15, ease of moving. I sure the list goes on. Here's a thought for your 3x15 cabinet. Remove the baffle board from the cabinet and flip it top to bottom. That puts the ports on the lower half like the 2x15 cabinet. seal off the inside of the cabinet between the now top and center speaker. You now have the same internal volume as the 2x15 cabinet. The remaining top speaker hole can covered or can house the siren horn, or cut some piece's of plywood to make a inch thick cover. (The inch thick piece would cover the original hole and mounting bolts and retain the cabinets ability to return to it's origin) that could mount a pair of 8" speakers or any configuration of smaller speakers with either a passive xover or add another jack for a electronic xover.

Don

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Mon, 16 Feb 2004 01:42:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

ET seems like I remember once on one of other threads something about that big mackie making funny nosies thru one of your Kustoms although I did'nt know what made it at the time and did'nt know it was three fifteen. I'm glad it was'nt your speakers. Don your theory on this was interesting too on two eights. Do they make good eights for bass? What do all of you think about maybe replacing the top fifteen with and eight ohm ten then? Thanks again for your thoughts. Would two eights require more air reflex space than the one fifteen or is that just in my mind? I can see where the two eights in sixteen ohms would then give me that magic four ohm equalized total number when combined with the two lower fifteens.

Subject: Re: Cab speaker impedances
Posted by [Anonymous](#) on Mon, 16 Feb 2004 17:59:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

...hey guys, got a question about impedance o.k.?...I'm replacing two worn out CTS 15"s with a couple of Eminence 15"s rated at 4 ohms each...if I wire them in series I'll get 8 ohms right?...and

in parallel it would be a 2 ohm setup right?...if the CTS's were 16 ohm (and this I don't know as the magnets were painted over) and they were wired in parallel the ohm rating would be 8 ohms right?...is this how the K-200 cabs with 15's in them were set up new from the factory with 16 ohm speakers wired in parallel to get an 8 ohm rating?...I'd appreciate and feedback on this...thanks, Rick...

Subject: Re: Cab speaker impedances
Posted by [ET](#) on Mon, 16 Feb 2004 21:12:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

yeah, long time ago I was complaining that I finally had gotten more muscle behind the amp side of things, only to have my speakers fart out...and the amazing thing was that my speaker Doc knew immediately what the problem was...and just moving the eminence from the top position to the bottom was enough to clear it up...it literally sounded like I had blown speaker and was hitting them too hard..they would "whap!" on the lower notes..yet when you pulled them from the cab, they tested fine...someone also mentioned adding longer porting or even on those 3x15s you can consider flipping the baffle, isolating the top 15 chamber and then porting it on the back so it can get some air of its own...good example of rear porting on the older Peavey TNT 2x10 cabs...to me, if you've got a 3x15..be proud of that towering beast and use the thing...so it doesn't pump quite as much db...the visual alone makes it sound louder!

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Tue, 17 Feb 2004 01:12:18 GMT
[View Forum Message](#) <> [Reply to Message](#)

Rick you are absolutley right on all of your wiring assumptions. Et is that what you did to your 3x15, just took out the top speaker and put in two 8 ohms? Or did you flip it the bottom and top over speaker board over too? It would seem that going with just the two bottom two fifteens would help with the internal volume of the cab too. But a couple of eights in the top would sure help the pop too.

Subject: Re: Cab speaker impedances
Posted by [pleat](#) on Tue, 17 Feb 2004 04:18:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

I don't know why my handle didn't appear on the flipping of the baffle board, so I thought I should take credit good or bad on my post.
Don aka pleat

Subject: Re: Cab speaker impedances
Posted by [Bill](#) on Tue, 17 Feb 2004 04:25:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

I have a Frankenstein 3x15 which has two JBL E140 bass speakers (8 ohm) and still has the horn at the top. The cab came with no ports, so I put in 8 hidden port tubes. This thing is a monster bass amp, and still has the highs with the horn. Also have a k200b with two Carvin ps15 8 ohm speakers....a completely different animal than the Frank. I even built a 5 inch extension on the back of a 2x15 cabinet which really brought out the lows! Like the others said do a little switching around and see what you like. Everyone's taste is different, but All Kustoms are KOOOOOL! Enjoy that Kustom. We all do.
Thrill Bill

Subject: Re: Cab speaker impedances
Posted by [pleat](#) on Tue, 17 Feb 2004 05:13:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

My original thoughts on flipping the baffle board over, and then sealing off the internal side of the cabinet was to match the internal volume of the kustom 2x15 cabinet. It sounds like a lot of players like the sound of the 2x15 cabinet over the 3x15 for bass. The thought of adding a pair of 8" or a 10" speaker in place of where the other 15" would go was to add some snap and to try and get a 4 ohm load to the amp. Keep in mind that the smaller speakers are operating at a frequency at a predetermined crossover point. Say 2K or higher, they are intended to get some snap out of the higher frequencys only. So with the higher frequencys you don't need a super heavy duty speaker. The original siren horn could be used, just up the crossover point. Bands are miking and using direct in's to the pa which in turn are driving pa stacks with 18's,15's, and horns. ET suggested just leaving the speaker in place not wired. JBL used to do that in some of their cabinets. The dummy speaker was called a passive radiator. That would require leaving the cabinets internal structure as it is even if you decided to flip the ports to the bottom half. Yet another thought is, leave 3x15 cabinet original, place two 8 ohm speakers in the cabinet and wire it parallel for 4 ohms and send that pair to the speaker jack. Add one 4 ohm speaker in the remaining spot and wire it to another speaker jack. The pair of speakers can be driven by the k200 4 ohm amp. The single speaker can be driven by a second 100 watt slave amp. The signal for the slave amp can be tapped from the RCA jack on the back or you can add a slave amp out from the speaker output with the right resistors and wiring arrangement which I have posted on the site before. Kustom made the monitor 3 amp with the 7 band eq, that amp would be a good one to use. This arrangement makes the most sense to me. Smaller gigs the pair of 15's wired in parallel with the kustom head, leaving the single 4 ohm as a passive radiator, the bigger venues, use the same cabinet and head and add the second amp, doubles the wattage and gives you the magic 4 ohms every time.
Don

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Tue, 17 Feb 2004 05:39:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks Thrill Bill. You're right of course all Kustoms are cool. Did you use a cross over on the horn? This old amp is kinda famous in these parts too as it used by and earlier incarnation of the

Allmans who played and practised in this area called Hour glass for two albums. The only hit off of them was called the Power of Love. It sounds nothing like the more modern song by Heuy Lewis of the same name. The old amp was never loud and I thought it was due to the head being weak for years. If I took out a speaker or added a back board for the eights these are all mods that could be easily undone with no harm to it. Does anyone have a good site for eight inch bass speakers?

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Tue, 17 Feb 2004 17:56:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

HI all.2-8s or a 10" is a good mod, but that internal part of the cab should be closed off from the 15s so they respond to only their air movment.Parts express has the eminence 8s and 10s to use.

Subject: Re: Cab speaker impedances
Posted by [Lucky](#) on Tue, 17 Feb 2004 21:40:03 GMT
[View Forum Message](#) <> [Reply to Message](#)

So...please clarify for a guy whose head spins at just the slightest mention of electrical engineering.

If I've got a Kustom 100 head, with an 8 ohm output...and I plug it into a 3x15 cab rated at 5.6 ohms...it's not going to do any damage to the head? I've always been under the impression that you had to match stuff exactly or risk the wrath of blowing up amps.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Wed, 18 Feb 2004 07:17:18 GMT
[View Forum Message](#) <> [Reply to Message](#)

Do you got and address on a site for that parts place for the speakers? Thanks Steve. So what you think is that I should flip the board over and use the top as the bottom with the eights in the new top then?

Another idea I had was maybe replacing the two fifteens with two twelves and then the top fifteen with the two eights. Would the cab have enough internal volume for those smaller speaker areas then?

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Wed, 18 Feb 2004 12:43:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello. Hey Qmoder This will be a long reply that I will not have time for untill friday or next monday, I am in the process of moving to a new home.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Wed, 18 Feb 2004 20:23:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thats great that you are getting a new house Steve. Thats one of the best things you can get in life is a good homestead. I will really be looking forward to your long reply too.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Mon, 23 Feb 2004 03:56:05 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Steve did you get moved in? Is there a formula to figuring how many square inches of internal volume room you need in a cab as compared to the square inches of speaker you'll have it in? Is it more for Bass or Keys than Guitar due to the greater reflex movement? What is the area of a 3x15 K200 compared to a 2x15 K250 for instance? Thanks all.

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Tue, 24 Feb 2004 12:42:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi, I will get back to you on all that on thursday. I need to find where I BOXED up all my reference material.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Wed, 25 Feb 2004 00:41:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks Steve see you Thursday then. I hope you are enjoying your new house.

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Fri, 27 Feb 2004 12:55:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi.Ok, heres the first part of what would do with that 3-15 cab.Some of what the second part of this will cover will depend on the funds you have to work with.First thing would be to rotate the baffle board as was suggested in a previous post. Get some good non rotting type 3/8s inch door or window weather stripping to get a good air tight seal on the baffle when you reinstall it, and get enough to do the rear all so.If you can afford it replace the CTS speakers with parts express 15s part number 290-422. These are a eminence made ones that go up to 4000 cycles so we can cross it over at about 1500 to 2000 cycles. They go for 121 dollars. all so get 2 part number 290-402 speakers these are sealed back 8" ones that will let us use the whole internal volume of the cab. If we would use any other type of speaker we would have to close off the upper cab area

for the upper speaker(s) to work right. Make a new bolt on baffle for the 8 inchers, do this while you have the baffle out you will have to drive on of the original mounting bolts from the 15 out so it will not puncture one of the 8s. Do not worry that the two 8s will over hange the original 15s opening, but if you want you can make a whole new one peice baffle. Also order 1 268-350 port tube and two 260-775 speaker mounting kits. These new 15s will work well with the about 9 sq ft of volume that cab has, and they are more that 3 db more efficent then the CTS ones so even if you run them just off of the kustom head you will have twice the amout of clean head room before the amp breaks up. The 8" speakers are 35 dollars each. Also while you are at it remake the back board cross brace and glue in wood blocks so that the cross brace can be screwed in, you can make two of these and add another at the other end of the cab. Do not add these untill you are done with the baffle swap, infact you will have to carefully remove some of the the cab back mounting strips to get the baffle out. End of part 1. talk to you next week or when your ready.

Subject: Re: Cab speaker impedances
Posted by [pleat](#) on Fri, 27 Feb 2004 16:36:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

Now thats what I was trying to describe in my post on flipping the baffle board. The only difference I suggested was making a 1 inch thick new baffle board for the 8 or 10" speakers, drilling holes same pattern of the original mounting bolts for the 15" speaker. That way the cabinet could be returned to original without having to drive out the original mounting bolts. I would be afraid of the bolts poking holes in the grill cloth.

If you do decide to drive out the mounting bolts, maybe wetting the grill might relax it enough to stretch to remove the bolts.

Let us know how it turns out.

Don

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Sat, 28 Feb 2004 04:34:18 GMT
[View Forum Message](#) <> [Reply to Message](#)

Man this one great plan you've got here Steve. I'm gonna run this off in case the board loses it. I assume that these eighths are bass speakers. This should make it one very cool and efficient cab. How did you move turn out too? Do you like your new place?

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Mon, 01 Mar 2004 12:54:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi. the 8s are midrange speakers that will be crossed over with a passive type crossover, or better yet if the funds are in pocket a electronic 2 way with a seperate power amp for the 15s. The kustoms own output will drive the 8s. but we will need to do some mods on the head to break open the feed to the output stage.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Tue, 02 Mar 2004 03:20:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

Man this stuff is deep tech.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Mon, 15 Mar 2004 04:39:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

I thought I'd add this back to my original post instead of starting a new one. I disconnected the middle speaker in my 3x15 and hooked up just the top and bottom 15's. I'm running it with another 2x15 and its nearly the same as my other double cab setup. The nice thing about it is that you do have that top speaker in the bass players ear so that he hears himself. The speakers in all of my Kustoms distort a little on bass and I think its just the nature of the amps to do it. They are of the cts variety. We're having a jam tonight so we'll see how the new set up does in a live band situation.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Wed, 17 Mar 2004 01:13:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

The trial run was unsuccessful so far. The problem is that it was very distorted. It could be that head. I have two heads returning the Tech on Thursday. He called today. One is and A series the second is a B series. The head that is running the 3x15 now is and A series. However it does have some problems as one of the channels is bad right now. If this is'nt it I'll try two twelves or any other fifteens that are suggested as replacements. I was thinking too that it could be that when the two functioning 15 move back in that they could be making the middle fifteen push out and there fore make and out of phase pressure wave. But that natural compression might be helping. Ideas anyone. We had a great time though. I used my new Rickenbacker and the my nephew the bass player used the 3x15 and 2x15 together at first then he swithced to my other double cab 2x15 for the rest of the night.

Subject: Re: Cab speaker impedances
Posted by [Anonymous](#) on Wed, 17 Mar 2004 18:19:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

qmoder,
check to make sure the polarity matches on all speakers. good luck.
Thrill Bill

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Thu, 18 Mar 2004 01:50:59 GMT

[View Forum Message](#) <> [Reply to Message](#)

I called myself doing that when I wired it up but I might should look at it again. I should be getting my repaired amp back tomorrow and I'll see what it does with it first. If I can't find the problem then I suppose its time to remove that middle fifteen put a plate its place, Get two twelves to replace the two used fifteens or both. Any advice on which one to do first if the repaired amp head doesn't cure its distortion problems and the wiring is Ok?

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Thu, 18 Mar 2004 12:55:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

That disconnected 15 is creating a loss of bass, and may be a phase problem. At the volume level I normally play at I have found that the k200s and k250s need good SPL rated speakers to get enough undistorted bass output to have good head room left for dynamic changes.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Thu, 18 Mar 2004 20:39:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Steve.
Even though its not hooked up right now it sounds like the middle 15" speaker will have to come out like a bad tooth. Would you recommend two speakers to replace the other two, just the top and bottom speakers. I am also using this cab with another Kustom 2x15 cab right now too. The other one seems fine.

I like that fifteen in the top of the 3x15 being by your ear. It seems that it helps me (we all take turns) or whoever is playing bass to hear themselves better without having to turn up more. That may be this old Buggers niche and it might even sound better than a 2x15 with the additional reflex room then.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Fri, 19 Mar 2004 04:50:16 GMT
[View Forum Message](#) <> [Reply to Message](#)

Its not head related, cab, or bass related. At least not with what I've got to compare it too anyway. I have five working heads now and it does the same things in all of them. Two different basses. I also have a 2x15 cab hooked up with that set up. I have another full double cab 2x15 setting to it that I tried. This set up is in the shape of an L next to this one. So its easy to compare both setups sound.

You just don't notice the distortion as much unless you lean down there and thump that E string due to the 2x15 double cab being lower to the ground. My nephew just makes the effect more pronounced as he has a harder touch than mine.
I even A/B'ed the two amps together and listened closely. You really just notice it more in the 3x15

because that speaker is up there by your ear. Do the bigger Kustom cabs like the 250 and 500 series do this? If so size has no bearing. Is it something that more effecient speakers can solve? You folks who have better brands than just the stock CTS. I think I would replace the ones in the 3x15 if so because you can hear that top one so much better. What is the Thiele specs of the CTS speakers? Does anyone know? The CTS speakers hold on for dear life and its no point to replace them unless its really known to help.

I know this is a lot of questions but I see no need right now to remove the middle speaker, replace it with a plate, or really do any more to it until I get more input from you fellas.

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Fri, 19 Mar 2004 13:20:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi, a easy thing to do would be to duct tape over the rear of the center speaker and unhook it, wire the cab for 8 ohms if you are going to use 2 cabs and see how it sounds to you, if its better with 3 tare the tape off and rewire it and enjoy.

Subject: Re: Cab speaker impedances
Posted by [QModer](#) on Fri, 19 Mar 2004 19:55:10 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Steven.

Thanks I have already disconnected the middle speaker and wired it for eight ohms. The duct tape is a good idea for a quick fix. But the air from those fifteens would probably leak around it some. I suspose for the next stop I should just make a plywood plate now. How thick should the plywood be?. Should I seal with with some silicon too, some of other type of sealant, or just bolt it down down with the speaker bolts?. Any other ideas or solutions are welcome here. Especially if some one has already tried this. How about some of you people with the bigger 250 cabs that have 2x15's already. How do they sound?

Subject: Re: Cab speaker impedances
Posted by [arpie](#) on Sat, 04 Mar 2017 18:47:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

I just acquired 2 of these beasts, and to your point regarding contents of said cabinets, let's not forget mice. There was a little nest made of chewed op newspaper in the bottom of the one cab. I have need of handles and casters, if anyone knows a source. I also need 2 CTS 15's, as one cab has been cannibalized to keep the other going. Sources for any of these items would be greatly appreciated!

Subject: Re: Cab speaker impedances
Posted by [stevem](#) on Sun, 05 Mar 2017 12:31:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

The bigger 250 cabs do sound a tad better.

A 1/2 thick block off plate is all that's needed.

No silicone sealer, just good home door weather stripping so you can remove that plate without ripping up the Baffle should that day ever come.
