
Subject: Bass Distorts on Volume 4

Posted by [willy](#) on Thu, 15 Apr 2004 14:07:10 GMT

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Hi All,

I was the one who wrote about a pleasant surprise finding two Altec Lansing 421A's inside a circa 1971 250 bass rig my son bought.

Maybe not so pleasant. I played his Fender Lyte (1997 Japan - active P&J pickups) through it last night and the amp "farts out" (I hate that saying but it is descriptive) at 4 on the volume setting.

Methinks this is not Kosher.

Tell me please what re-coning is. Also, do the active pickups on the bass guitar have anything to do with this?

I would hate to buy some new Goddess-endorsed Carvins unless the problem is indeed the speakers.

I have a gut feel that a 250 rig with 2 15" speakers should rock the house and not distort on volume 4.

Whatch'all think? New speaker time?

Thanks and Regards,

Willy 2 Shoes

Subject: Re: Bass Distorts on Volume 4

Posted by [LesS](#) on Thu, 15 Apr 2004 21:44:02 GMT

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Willy 2 Shoes,

When this happens, is it really loud?

In other words, does it seem like 125 watts?

It is not unusual to get full power at the 4 setting.

With the bass EQ cranked (on the guitar or the amp), this would happen sooner.

found, too, that Kustom's zero setting (12 o'clock) on bass controls is not always "flat" - sometimes you have to set it on 11 o'clock to get no bass boost.)

Also hopefully the Altecs are 8 ohms each and they are wired in parallel. The speaker bolts and the screws for the cabinet back should be tight.

-Les S.

Subject: Re: Bass Distorts on Volume 4

Posted by [KustomBlues](#) on Sat, 17 Apr 2004 03:41:13 GMT

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Being very familiar with this rig, I'd say that if you have your tone controls somewhere in the middle to 3/4 full, and your volume to 4--it should NOT be distorting with a PASSIVE bass. Active electronics do overdrive these inputs on these old Kustoms, so my guess would be to try and play a regular passive pickup bass through it. Take the battery out of the p-lyte and try that. I had one of those and did that when I used it with this head. Now as for the speakers--There is a good chance that the speakers have been over-excursioned because the head will put out awesome bass, and the old speakers didn't handle it to well even when they were new. I would certainly recommend loading the cab with some \$80.00 PS15 Carvins if you want a cab you don't have to worry about. Just some advice from the Low Frequency Goddess, otherwise known on this board as Kustom Blues..... :-) Deb

Subject: Re: Bass Distorts on Volume 4

Posted by [Anonymous](#) on Sun, 18 Apr 2004 02:36:12 GMT

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Deb,

Thanks for the opinion. Love your term "overexcursioned."

Even though the speakers were the primo ones when purchased (Altec Lansing 421A's) in 1971 or so by who knows whom, it has been my gut feeling that whatever speaker, good or bad quality, must lose some effectiveness over the years.

Therefore, I will take your advice and try the PS15's.

I recently took the back off the cab and it does not look like a big deal to hook up the speakers.

Should I put more acoustic insulation into the box? There is a flimsy couple of pieces in there but I don't think anyone has ever opened the box.

PS: Geez, Gal I hope you are feeling better. I had a heart attack 5 years ago and had an angioplasty - ya' know, the thing that props open the artery.

I hope I get to meet you someday because you have been so very helpful to me.

"Willy 2 Shoes"

Bill Armsden

Stoneham, Ma.

Subject: Re: Bass Distorts on Volume 4

Posted by [steven](#) on Mon, 19 Apr 2004 11:46:07 GMT

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Hi .most active pickups are atleast 6 DB to hot for these old preamps. Use the lower gain inputs on the amp/and or back down on the guitar volume.On my fender with active EMGs that I put in back in 84 my 250 will start to ditort at around 4, but its plenty loud. NEWER active pickups are even hotter!

Subject: Re: Bass Distorts on Volume 4
Posted by [QModer](#) on Sun, 25 Apr 2004 03:43:11 GMT
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I have three different bass rigs. Please don't think of this as a Kustom bash because I love my Kustoms.

But I have found this same thing that you are talking about to be the same in all three rigs. One is a double cab 2x15, K200 set up in Cascade. Another is a White, K200, 3x15. The third is Charcoal, K200. I have a fourth black bass head too. Mine all do the same thing on four or as some people call it ten oclock. I notice it the most in the 3x15. Probably just because that top speaker is closer to your ears

So at first I disconnected the middle 15 in the 3x15 to have more air room in there and hooked up the charcoal 2x15 cab with it. It was still there. I intend to remove the middle 15 eventually and make a plate to cover it to see if that helps.

I have used three passive basses on these amps so its not the basses. These are Hofner imitation, a P bass imitation, and real old P bass.

I am now wondering if its the amp heads, speakers, or just not enough room in the cabs. I'm very willing to experiment but I wonder if any one else has already solved this one for us?

Subject: Re: Bass Distorts on Volume 4
Posted by [BC](#) on Sun, 25 Apr 2004 08:50:30 GMT
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I can reach in my memory and tell you that I could never go higher than the 10 o'clock position on the volume with my 200 Kustom in 71 when it was new. The 200s and 250s I use now all max out in the low range of the volume knobs.....with premium speakers such as JBL 140s I can run a little higher.....but at this level I am getting all the volume I need. A second 8 ohm cabinet on a 200 makes the fullness and perceived volume really come on.....and the 3x15 cabs seem much louder. I use 200s and 250s for most performances now and I have never been asked to turn up either one! But maybe it is my playing and not the volume that is the concern!BC

Subject: Re: Bass Distorts on Volume 4
Posted by [QModer](#) on Sun, 25 Apr 2004 22:14:24 GMT
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The volume is definitely there as you say BC. No louder than four is needed. I would like it to be a little cleaner though. Not sure but I think thats what he is after too. It could be a that a lighter touch is needed.

I would still like it just to stay a little cleaner though. Especially in the 3X15 with speaker up near your head. I do like it up near your head though as you can hear yourself better in almost any situation.

Subject: Re: Bass Distorts on Volume 4
Posted by [QModer](#) on Sun, 16 May 2004 10:19:23 GMT

Its not the speakers, its not the internal volume of the cabs, the size of the ports, or the depth of the ports. I have several amps but I tried to make this go away in a 3x15 Big K for and experiment.

I disconnected the middle speaker. Put in a plate to cover that hole. Tried different speakers. It still distorted. But it was only more noticable because the top speaker was in your ear. But thats just how I like it.

So I finally moved one of my Pa power amps in there and used a cheap back up Behringer mixer I have as the preamp. I used it thru the 3x15 and one of the 2x15's.

Result a great sounding combo. I added back the middle 15 but still disconnected and still its great. Now the old girl looks and sounds like she was made to.

I ran the controls flat just like you would for vocals on the mixer. However if you add bass it can have just as much bass on the bridge pickup as the neck pickup.

This is and eight hundred watt amp thru four ohms in bridged. Right now I have it on eight ohms in stereo for four hundred watts. I could run it thru all four bass cabs and I will see what that does next. But its power a plenty now.

Perhaps the best thing would be is run the cascade double cab with its Kustom head on and A/B switch with this set up too. That was if you want distortion ah la Grand Funk its the push of a button away.

The world still needs a wall of Kustoms. I think that one of these amps would fit in one of the later Kustom reissue heads for a total Kustom look too. It would be nice if some one would produce a 250 head cabinet or one of those deeper reissue Plexi head cabs that could be modded with one of these while still maintaining the Kustom front for a faux Kustom.

It is nice to know though that our basic cab and speakers are still good viable amps and need nothing but more power in the heads.

It may even be possible that some one could find the offending agent in the heads that cause the distortion on bass at four or above and fix it. They are still just what the doctor ordered for guitar however just like they are. I can't think of any other SS amp that sounds so good like a Kustom does for guitar.

Subject: Re: Bass Distorts on Volume 4

Posted by [QModer](#) on Mon, 17 May 2004 03:24:25 GMT

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Perhaps there is still a way to use the preamp controls of the Kustom heads on this larger Power amp.

Subject: Re: Bass Distorts on Volume 4

Posted by [C4ster](#) on Mon, 17 May 2004 13:15:46 GMT

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I have done that very thing many times. My son played through a K200B1, directly fed a Sunn SA21 600 watt amp bridged at 4 ohms, and no speakers connected to the K200. Keep the volume down on the Kustom, and set the power amp level for max power while watching the peak display. Any power amp will work. You can get the thunder you want without distortion. The full ouput

voltage at 100 watts is only 20 to 25 volts RMS. That can go into most power amps without modification. The ratings of most power amps are about 1 volt input for full output, but that is the MINIMUM you can send to the amp for full output. You can hide the amp behind your rig and DON'T TELL ANYONE!!!!

Subject: Re: Bass Distorts on Volume 4

Posted by [QModer](#) on Tue, 18 May 2004 00:07:44 GMT

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Wow thats wild C4caster. I would have been afraid to try that with any of my amps. So you actually used the speaker out put of a Kustom to drive another amp by plugging the speaker output of the Kustom directly into the input of the other power amp?

Subject: Re: Bass Distorts on Volume 4

Posted by [C4ster](#) on Tue, 18 May 2004 04:05:45 GMT

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I have used that arrangement with no trouble. The level control in most power amps is the first thing in the signal circuit. As long as you keep the output of your Kustom relatively low, test this with the speakers attached, and adjust it to have a room sized level. Then disconnect the speaker and use a shielded cable to connect the speaker output directly to the 1/4 inch input of your power amp. Then adjust the control to the desired level. You should be able to get all the power out that the pwer amp can produce. Just limit the output to twice the RMS capacity of the speakers you are using. I run JBL E140's, which are rated at 200 Watts RMS at 400 watts all night long. I push 4 JBL's in my PA with a QSC PLX 3402 amp, 1700 watts into the subs. I still don't know what the limits of those columns are.

Conrad

Subject: Re: Bass Distorts on Volume 4

Posted by [QModer](#) on Wed, 19 May 2004 02:58:53 GMT

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Sounds scary but I know it would be scary loud too. Kinda like the first time I plugged my turn table into one of my Kustoms LOL.. I know that plugging a tube amp's out put to the input of anything but a speaker cab would be kiss of death for the tube amp but I guess its a different story with the SS Kustom heads.

What possesed you to try such a thing? Probably the same thing that made me put a turntable in one I guess Har..

Subject: Re: Bass Distorts on Volume 4

Posted by [C4ster](#) on Wed, 19 May 2004 13:03:56 GMT

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It really isn't such a scary thing to do. I am an amp tech and I test amps with and without loads all the time. It is true, you don't open loads to a tube amp, but you can short the output. Fender does that with their old Bassman, Super and other amps with the output jack. When the speaker plug is removed from the amp, the jack shorts the output transformer. That is to keep the amp from developing a large output voltage. That is a normal function of an inductive device, which a transformer is. A solid state amp is limited by the power supply voltage which in a Kustom is around +/- 38 volts or so. That is the peak to peak output voltage, about 26 to 27 volts RMS. There is NO danger running a solid state amp open. DON'T SHORT IT!!!! Just the opposite of a tube amp. Tubes are voltage controlled devices, transistors are current controlled. That is the reason why the amps sound different. Besides, the reason I tried it was because I wanted more of that great Kustom sound.

Conrad

Subject: Re: Bass Distorts on Volume 4

Posted by [QModer](#) on Thu, 20 May 2004 02:09:48 GMT

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The closest I ever came to this was once when I hooked the cab into the extra speaker out of my Bassman. I got the same sound just less of it volume wise. I thought sure I had blown a main tube LOL..

So then you don't even have to hook a speaker in the second output jack of the Kustom. Just use the first output jack of it plugged into the first input jack on the Power amp. I would imagine the Kustom would have to be turned down low as the out put of it is probably a much higher signal than the cheap Pa board can supply.

So that the Kustom amp section would just a large signal producer of the Kustom's preamp. That way you would achieve then is same tonal characteristics of the Kustom head just lots louder. Could you run the power amp in stereo by plugging one speaker jack say the first one of the Kustom into one input of the power amp and the extra speaker jack into the second input of the Pa power amp.

Subject: Re: Bass Distorts on Volume 4

Posted by [C4ster](#) on Fri, 21 May 2004 04:19:45 GMT

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Sure, you could do it that way. The 2 output jacks on the K200 are in parallel and either one will work. But you are not stereo, just dual channels. I run the power amp mono bridge with only one input. Just use a power amp with a power rating less than or equal to 2 times your speaker rating. The speaker load should be 4 or 8 ohms only. Do a little research on your speakers and the amp you choose and experiment. You will be amazed.

Conrad

Subject: Re: Bass Distorts on Volume 4

Posted by [QModer](#) on Sat, 22 May 2004 03:39:40 GMT

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I'm kinda ignorant on power amps as you can see. It still would still not be true stereo I know even with the Pa board its the same initial signal even though it feed thru both sides of the board.

Its just that bridged in mono I was not sure if you should still use the speakers outlets of A and B in back on just the ones on A if it is in bridged mono.

This centron power amp is and old one. But it still sounds fantastic for bass. I use my new Mackie for vocals. This amp is rated eight hundred watts at four ohms stereo and four hundred watts thru eight ohms.

By using the eight ohms Kustom cabs in the stereo mode fed by the mixer I figure it probably makes around two hundred per side or I could make it four hundred per side if I ran all four cabs in the stereo mode. Tell if I'm correct in that thinking?

Subject: Re: Bass Distorts on Volume 4

Posted by [C4ster](#) on Mon, 24 May 2004 13:31:16 GMT

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I haven't ignored you. I have not had much time to respond to these posts. E-mail me directly at C4ster@aol.com and we can continue this discussion in more depth.

Conrad

Subject: Re: Bass Distorts on Volume 4

Posted by [QModer](#) on Tue, 25 May 2004 02:13:02 GMT

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Thank you C4Caster you've got mail.
