Subject: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 19 May 2011 13:31:07 GMT
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I made a trade the other day with some Home Audio stuff that was given to me which I would never use so I traded it off for a Rasa (Panasonic) 12 channel Mixer which works great and they guy threw in an old Kasino Club 100 watt (Kustom) 4 channel mixer from the 70's. I hooked it up last night to some speakers I have that I have pushed with my CS800 and the Rasa Mixer and my BI-AMP powered mixer and the speakers sounded fine. Hooked them up to the Kasino head and if you even turn them up even a little bit the speakers did not sound clear and slightly distorted expecially on the bass notes of the music I was playing. Would you suspect caps or Output transistors or both? Or something else. The Reverb is out of it but that I would suspect should not cause any speaker distortion.

Subject: Re: Distortion in an Kasino Club PA head
Posted by chicagobill on Thu, 19 May 2011 16:28:39 GMT
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Welcome to the place.

If all channels distort, then the problem is probably in the power amp. The cause could be any number of things. Some simple, and some not so simple.

Are you planning on fixing this yourself?

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 19 May 2011 18:23:35 GMT
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Yes I plan on working on it myself I cannot see spending the money on a tech doing it as it is just a project amp to me and will just be used as a spare amp. Before you give me the dangers of working in amps I know all about that. I have done a cap job in an old Traynor Mono Block Bass amp and did a Cap job on my Fender MusicMaster Bass amp. I replaced the Filter caps on several other amps and built two guitar amps from old tube chassis. But I have messed with tube amps more then Solid State amps so I need a bit of ideas on this one where to look. What I am trying to say is I am not a tech by any means but I do know a bit of electronics. I took a Electronics class back in the 70's but never used it as circumstances had other plans for me. Only test equipment on hand is a digital multi-meter.

Subject: Re: Distortion in an Kasino Club PA head
Posted by C4ster on Thu, 19 May 2011 19:02:52 GMT
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The amp you cited, the CS800 is a power amp only with an input range of 1 volt to 20 volts from a

mixer. The first thing in that amp that your signal sees is a volume control to limit the input to deliver the maximum output. The Kustom amp however, has preamps that take much less input than the CS800, in the millivolt range. The first things in that preamp are transistors that you are probably overdriving. The volume controls are after these input transistors. So even if you turn the volume down, the amp is already distorting before the signal gets to the output stage. Try a high impedance mic in the Kustom and see if it distorts, or a guitar. That might tell you plenty.
Conrad

Subject: Re: Distortion in an Kasino Club PA head
Posted by chicagobill on Thu, 19 May 2011 20:37:26 GMT
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The pc boards in your amp are marked with numbers such as PC102 on the foil side. If you list them we can either send the correct schematics or send you to site to get them. That is if you don't already have them.

I would suggest starting by checking the power supplies for the power amp and the preamps and go from there.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 19 May 2011 21:07:07 GMT
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C4ster wrote on Thu, 19 May 2011 14:02The amp you cited, the CS800 is a power amp only with an input range of 1 volt to 20 volts from a mixer. The first thing in that amp that your signal sees is a volume control to limit the input to deliver the maximum output. The Kustom amp however, has preamps that take much less input than the CS800, in the millivolt range. The first things in that preamp are transistors that you are probably overdriving. The volume controls are after these input transistors. So even if you turn the volume down, the amp is already distorting before the signal gets to the output stage. Try a high impedance mic in the Kustom and see if it distorts, or a guitar. That might tell you plenty.
Conrad

OK so your telling me due to its design a mic or guitar maybe fine but playing music through it is over driving the pre amp transistors. I did try a mic and it did not sound all that bad. Since I have two PA mixers that work fine for playing music and other PA chores It is not that important that I use this for a PA. I wanted it to borrow to folks who ask me to borrow my expensive stuff that are in need of a PA. I will recheck it with a Mic again and report back.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 19 May 2011 21:33:18 GMT
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OK I tried a mic with limited success because I tried it in my utility room where most of my stuff is

stored and since it is little feedback is an issue but your right the music was over driving the input. If the amp had a Power amp IN I would keep it but since it only has line out and monitor out I think I will trade it off. Since I already have a powered mixer and other other mixer set up which both are more advanced than this older mixer. I do not need an other amp for guitar either so I think I will trade this one off if the music store will take it.

Subject: Re: Distortion in an Kasino Club PA head
Posted by C4ster on Fri, 20 May 2011 06:26:34 GMT
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I understand about loaning equipment out. A CS800 is big stuff and heavy too. The early PA heads usually don't have a line in so using that head with a mixer ahead of it can be tricky. Unless your music source is a very low level signal, controlling the output of the PA can be frustrating.
Conrad

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Fri, 20 May 2011 12:56:35 GMT
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I am surprised that Kustom did not make a amp in and amp out on their mixers as they were good equipment for their day. I had a Fender PA head that was Solid State that would have been the same time frame as the Kasino and it had not only a power amp in and out but a in and out for effects with a switch for each channel. It too was a 4 channel 100 watt mixer. I sold it and an other amp to get some quick cash to buy a guitar amp I got a great deal on.

Subject: Re: Distortion in an Kasino Club PA head
Posted by pleat on Fri, 20 May 2011 20:40:41 GMT
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I'm not a tech but the Kasino Club PA uses the same power amp as the K100-5 PA power amp. The amp is 50 watt RMS into an 8 Ohm total load. Using a lower impedance will make the amp run hot and could shut down.
As far as a line in and line out jack. That's a simple install. There are three wires going to the power amp. Red Green and either a tan or blue. Red and green are the voltage wires. The third wire is the signal from the pre amps. Cut and install two switchcraft 12A switching jacks and your good to go.
pleat

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Fri, 20 May 2011 20:47:21 GMT
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Called the music store they said they would take it even though they have an other one in stock. I need a power supply 9V AC 1.3 amp that cost twenty bucks I said I would trade the mixer for the power supply. A fair trade since I suspect they will only put 50 bucks on it.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 26 May 2011 02:01:42 GMT
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Well cannot take it to the music store until I try to fix it Reverb is not working I checked the tank and one wire was off so I re-soldered that but still not working so I will have to check it out again the rubber washers for the screws holding the tank pretty much rotted away. Any way Distortion on all 4 channels with a mic so I suspect something in the power amp section.I am wondering if the power transistors might be distorting/ I got some other Power Transistors I took out of an other older PA I will have to check to see if them are the same numbers and try replacing them unless some one has an other idea what is causing the distortion.

Subject: Re: Distortion in an Kasino Club PA head
Posted by chicagobill on Thu, 26 May 2011 15:58:21 GMT
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Distortion from the power amp is not usually caused by the output transistors. It is more likely a power supply problem or a bias problem.

Do you have access to a volt meter?

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 26 May 2011 16:55:47 GMT
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Yes I have two of them. They are cheap digital ones but they work

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 26 May 2011 16:56:29 GMT
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So your saying the filter caps?

Subject: Re: Distortion in an Kasino Club PA head
Posted by chicagobill on Thu, 26 May 2011 17:32:12 GMT
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Probably not, you should always start by checking the power supply. If the voltages are off they can cause the amp to die, distort, etc.

Take you voltmeter and read the voltage across the two big filter caps. Each one should have about 40-45 volts dc on them. The preamps run on + and - 8 volts dc.

Remember that when working on an amp that is plugged in and turned on can be dangerous. Be very careful what you touch and where you stick the meter probes, so as to not hurt yourself or the amp.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Thu, 26 May 2011 18:17:01 GMT
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I have repaired and recapped tube amps so I know about the dangers of working on electronics. But a friendly reminder never hurts. I will probably check it out this weekend as it is supposed to rain all weekend.

Subject: Re: Distortion in an Kasino Club PA head
Posted by stevem on Sun, 12 Jun 2011 14:28:23 GMT
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now it seems we have someone by name of Alice posting mindless comments to the board!

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Sun, 12 Jun 2011 14:32:11 GMT
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Yea I seen that yesterday spam I guess. Not sure what I want to do with this amp yet as I would not get much out of it from the music store and it is something I really would not use I might just scrap it out.

Subject: Re: Distortion in an Kasino Club PA head
Posted by cassent5150 on Tue, 28 Jun 2011 02:53:42 GMT
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I took on this Kasino Club PA for a project. Its a cute little Basic PA. Not at all like the usual square head like the K100-5. Its like the early 70's tolex K-III PA. I just got the Kasino Club in the mail today and opened it up. Its got the PC-5033 driver. Everything is clean as a whistle. Took all of 5 min. to track the problem to the driver board. Good clean signal from the line out. Saw those old square black caps still in it so I replaced the 2 27uf caps and while I was at it popped in new transistors next to the 2 caps I replaced. Didn't change a thing as far as distortion is concerned. I

may just go right through it and be done with it. It probably would be a whole lot faster than trying to pull parts check and reinstall them. I love these cute little boards. They dont take up much room and they can really put out some sound for the 75 watts they're rated at.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Tue, 28 Jun 2011 03:57:52 GMT
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Glad your happy with it Steve. Let me know when you get it finished up what you found with it.

Subject: Re: Distortion in an Kasino Club PA head
Posted by cassent5150 on Tue, 28 Jun 2011 08:35:27 GMT
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Sure Thing THANKS! !

Subject: Re: Distortion in an Kasino Club PA head
Posted by cassent5150 on Tue, 28 Jun 2011 23:13:20 GMT
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OK, I got back into it today when I got home from work. I recapped the board and replaced the driver transistors and BINGO!! A Driver transistor had a bad leg connection to the board, so bad in fact it burned the leg in two from all the arcing. Its purring like a kitten and quiet as a mouse. Kind of a cute little thing and fairly loud for a 75 watt PA.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Wed, 29 Jun 2011 03:39:39 GMT
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Congrats was that one of the transistors on top of the PA or on the board its self?

Subject: Re: Distortion in an Kasino Club PA head
Posted by cassent5150 on Wed, 29 Jun 2011 08:29:43 GMT
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It was one of the ones on the board itself. They're mounted in the square heat sink and soldered in the board.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Wed, 29 Jun 2011 15:21:47 GMT
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OK yea I saw them too. If I would have really needed a PA head I may have tried to fix this but since I have a Bi Amp 6 channel 300 watt Powered mixer and a 16 channel Ramsa (Panasonic) board and a Peavey CS 800 amp I figured that I would not bother and as long as you can get use out of it great. This way it worked out good for both of us. It was not the best packing job I could not find a box that would remotely even fit so I just surrounded it with cardboard and a pile of tape.

Subject: Re: Distortion in an Kasino Club PA head
Posted by cassent5150 on Wed, 29 Jun 2011 20:15:44 GMT
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Packing was fine enough, they're pretty tuff to tear up. I spoke too soon on the work fine thing. I took it to my music room and hooked it up to real speakers and the reverb only lasted a minute and quit. Got back into it again a hour ago and recaped that section of the board. I just tested her out and pushed the crap out of it. She works good now and I thrashed on it with a guitar for 10 or 15 minutes on 10 the whole time. I have to say it has some really good sounding distortion if you crank the gain up on her. Still nice and clean for vocal use though. I don't know that it will replace my soundtech equipment though. My brother in Kansas has got a pair of 2X12 Kasino speakers that have the same blue Kasino decals so this will probably go back to Kansas as a present to him. It would be fine for small barn parties if ya run just vocals alone with it.

Subject: Re: Distortion in an Kasino Club PA head
Posted by jh45 on Wed, 29 Jun 2011 22:48:27 GMT
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Yea should work good for that it did back when it was new. Back then no one miked anything as most PA's were 4 channel lucky you had enough channels for the Mics.

Subject: Re: Distortion in an Kasino Club PA head
Posted by simpson studios on Fri, 27 Jan 2012 17:27:54 GMT
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I havent done alot of work on the older amps just because iv never had to but i have the same distortion problem on the same amp. could i get some more info on the switching jacks. thanks Nick

Subject: Re: Distortion in an Kasino Club PA head
Posted by cassent5150 on Sat, 28 Jan 2012 00:45:55 GMT

Hey Pleat, your right on the driver board in the square 4 channel head, but the laydown model has that little 75 watt output board. I want to say PC 5032. I have both models and I just went through another laydown model for a friend. Steve C