Subject: Active Pickups & Input Overload

Posted by artto on Thu, 22 Jun 2000 13:44:23 GMT

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With the advent of many modern instruments having active pickups, you may experience input overload to the preamp section of 100, 200, 400 series amps before the power output section reaches full rated output. The newer models (150,250 etc.) apparently have attenuation on one of the 2 inputs on each channel.

The way around this is to turn down the input gain (volume) on the amp & run your guitar/bass with the gain turned up. I know, it sounds illogical. But by turning down the input gain, the preamp's input overload capacity or "headroom" increases making it more tolerant of the higher input voltages/current that it recieves from "hot" pickups. You'll have to experiment to see what level balances yield the optimum results for your fav instruments. The only downside is that you'll probably go through the batteries faster.

Subject: Re: Active Pickups & Input Overload Posted by BC on Fri, 23 Jun 2000 13:15:53 GMT

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I agree Art.....whenever I switch from a Ric to the Guild Pilot I have to back off the volume or we get muddy fast. That old familiar flabby distortion I got years ago trying to compete with full stack amps. No problem because I still seem to have the same output volume (I would confirm this if I ever find my db meter) BC

Subject: Re: Active Pickups & Input Overload Posted by Anonymous on Sat, 24 Jun 2000 05:43:30 GMT

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As with anything electronic, judgement is in order. The active electronics on the bass guitars you spoke of have a 0 db gain with the tone controls set flat. Boosting either the bass or treble controls are doing the same thing as a two band graphic equalizer, boosting as much as 12 db on each control. Max would be 24 db gain if both controls were at full boost. Any amp designed for guitar or bass would produce a pre-amp overload distortion. If you cut both controls to max cut would give the same tone as if the controls were at max boost, the difference would be the gain factor. It would be nice if amps came with a input gain control like mixers do, as I have to adjust the in and out on my effects processor with each guitar and amp to make sure everything is matched.

Subject: Re: Active Pickups & Input Overload Posted by Anonymous on Sat, 24 Jun 2000 05:45:47 GMT

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Subject: Re: Active Pickups & Input Overload Posted by Anonymous on Sat, 24 Jun 2000 05:46:04 GMT

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Subject: Re: Active Pickups & Input Overload Posted by niFe on Sat, 11 Mar 2006 08:39:43 GMT

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Major BUMP, Iol... this thread is an oldie.

Ok everyone, here's the deal. I just purchased an '05 Ernie Ball Sterling bass with onboard 3 band active eq. My good friend (who reintroduced me to Kustom after a long separation) has a K200-1 that I'm dying to try the new bass out on, but I'm worried that I might potentially damage his pristine piece.

So, do active basses run the risk of permanently damaging Kustom pre-amps, or will it harmlessly distort the tone? If so, is there any way around this besides what is already posted in this thread? As always, thanks in advance for the help!

Subject: Re: Active Pickups & Input Overload Posted by niFe on Fri, 17 Mar 2006 20:03:12 GMT

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ANYONE ?!

Subject: Re: Active Pickups & Input Overload

Posted by T-Bone on Fri, 17 Mar 2006 21:00:21 GMT

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I tried my K200 with a Marcus Miller Jazz bass and the preamp sounded great. In fact, the preamp seemed to do more for the sound on the K200 than on any of my other amps. However, in terms of damage potential, I couldn't answer. One of the site gurus on electronics might be able to help you there.

Subject: Re: Active Pickups & Input Overload Posted by C4ster on Sat, 18 Mar 2006 01:24:31 GMT

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I seriously doubt that you will do any damage with active pickups or effects. The output of an effect is hotter, but you just turn the input down until you get your desired result. Kustom amps usually start to distort at about 10:00 to 11:00 on the knob. If your ears bleed at that level then that's all you are going to get. People get too caought up in the position of the knob and think that there should be more because there is more knob rotation. Remember, in "This is Spinal Tap", they had amps that went to 11 not 10 like most amps. OOOOOOO I know a guy whose checking account couldn't be overdrawn because he still had checks left. (that was a tasteless dumb blond joke but I couldn't resist). The point is, just because there is more range left in your controls, doen't mean that there is any more power. Besides, most clubs, stages, basements and garges can't use a guitar player at full volume trying to get "that sound". Use a smaller amp and an effect. Works every time.

Conrad