Subject: Re: That line array sound
Posted by Anonymous on Wed, 15 Jun 2005 16:12:11 GMT
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>>Cone weight is lighter and the mass of air directly in front of the>>cone is much lighter. Hence faster? Isn't that punch? There is alot of myth and voodoo in audio. I don't buy into thesmaller drivers have better attack, punch, etc. I don't think theligher cone plays a big role either. I think Adire had a white paperon this? Based on my listening experience what gives me punch is SPL andamplifier headroom. I think it's that simple. I can drive my 8" midrange rated for 100db sensivity with a 600 watt bridged amp(160v headroom) and I have amazing punch and the crack from thesnare drum is ear shattering on transients. People using hornspeakers say the same thing about punch, well they get alot ofSPL from horns and if you amp has alot of headroom the transientswill have less distortion.I have an NSB array and the speaker cones are treated with 6 coats oflacque and there is just as much punch as without the mod, the onlydifference is a slight loss of sensitivity by doing this mod but thesound is superior to the untreated speaker. The loss of sensivitiydoes get interpreted as not playing as louder unmodded but to offset this I just turn up the amp a few notches.Recently I did an interesting NSB array test to see how much punchI can get form the NSB array. The system is full active with two amplifiers and 'digital' crossover. The NSB's are wired for 2 ohms per channel and a QSC RMX 2450 drives them. The amp is rated forabout 1200w/ch @ 2 ohm. The NSB's are rated for 5 watts rms and I'veclipped the amp on ocassion and there is no burning smell from the speakers so the array is handling that power playing music which hasa much lower duty cycle than playing sine waves in which case I probably would be smoking the NSB's -> {which I have done on my testbench prior to building the array}.The punch is pretty good as the amplifier has 110v rails so the clipping headroom is about 110v.The lastest test I did was to bridge the QSC for 220v of headroomand test one tower. The problem is. The amp is not rated for 2 ohmsin bridged mode but because the NSB's are not going to draw tons ofpower I figured it would work and it did.Having that extra power/headroom was noted, but I felt that it wastoo much for the poor ole NSB to handle as I didn't want to push itto 100% continuously, I did clip the amp to test the sound and itwas pretty intense. I played music at 75% from clipping and I had the perception of more punch just because I increased the power/headroom.I also had an uncanny sense of more depth to the sound but I can'tform final conclusion doing an auditon in mono, I need anotheramp to do the test in stereo. Who knows, I had do it. /lolI may do the long overdue ferrofluid mod to the NSB in which casethe power handling get a huge boost but I don't know the longterm {years} effects of having coolant inside the drivers becauseof the materials used to create the driver. Since these are 49 centspeakers I probably will mod another 32 of them {I have 288 morein stock} with the coolant and get another amp to show peoplewhat a 49 cent driver can do mated with 5kw of power. /evil/fun stuff