
Subject: Damping 511B ringing: Whats your experience?
Posted by [AstroSonic](#) on Mon, 05 May 2003 15:34:57 GMT

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The stock cast aluminum/welded Altec 511B horn rings quite audibly on playback in comparison to more recent non-metal horns such as the JBL 2380 which I also have. On some selections the sound even becomes 'shouty'. The excited range of frequencies is like those emitted when the horn is tapped or gently brushed. At this point I have reviewed the archives here (horn damping and 511b damping) and several suggested fixes were turned up. 1) De-stress the horn by separating/cutting the dividers. 2) Apply a few layers of paint and sand until the ringing is inaudible. 3) Apply a thick layer of window putty. 4) Apply a thick layer of duct sealant. 5) Apply a 'layer' of constrained layer damping material (like Dynamat), and 6) Build a box around the horn and fill with sand. My guess is that all of these methods provide some audible/beneficial improvement. I would like to do the most effective reasonable modification. The sand-filled box is out because it is just too heavy. I was favoring doing #1, but decided to investigate a bit further. I got a 50 # bag of 'playsand' and filled a total of 18 zip-lock sandwich bags. These were placed, first on the lips (above and below). I noticed an obvious but minor improvement. Interestingly, my wife commented favorably right away. I then added sand bags above and below the body of the horn, and this made a huge improvement (to me). This does suggest that the sound benefits from damping the body of the horn, as well as (more than?) the lips. The sand bags on the body of the horn can stay, but the bags on the lips have a very low WAF and must be replaced with an alternative. Anybody had experience with one or more of the above approaches? I am especially curious about the 'constrained layer' technology. TIA, AstroSonic