Subject: Calibration microphone help needed
Posted by Mr Vinyl on Mon, 05 May 2008 15:21:13 GMT
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Hi all,I recently acquired a Marantz AX-1000 Audio Computer. It was made in 1991 and is among other things a digital room analyzer. Unfortunately the microphone that came with it (AKG C-460b) is long gone. Can someone recommend a replacement calibration microphone with a very flat frequency response? I don't mind spending some money but don't want to spend a fortune either. Maybe under $250 if that's possible? It needs to be flat from 40-16,000. I was thinking of trying the Behringer ECM8000. It's only $50 but claims to be flat 20-20,000 +/- 1db. See link. Are these figures to be believed or is it like speaker specs?Thanks in advance.Mr Vinyl
http://www.parts-express.com/pe/showdetl.cfm?partnumber=248-625

Subject: Re: Calibration microphone help needed
Posted by Wayne Parham on Tue, 06 May 2008 19:52:07 GMT
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Behringer microphones use those little Panasonic "puck" condenser cartridges. They're very inexpensive, but they have very flat response curves. It's pretty amazing really, that these cheapo mics work so well.You can get a microphone that's calibrated and they'll send you a file with the actual response curve for you to input into your measurement system. That way, it will compensate for any ripples in amplitude and phase response. But those pucks are so flat you can use them uncalibrated and get within a decibel.
Panasonic WM-61 Condenser Microphone Element

Subject: Thanks Wayne, One more question if I may...
Posted by Mr Vinyl on Fri, 09 May 2008 20:53:31 GMT
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I purchased the Behringer but didn't realize that it was rated for 15V-48V My Marantz' microphone board is rated for 12V only. The Mic seems to work perfectly. Do you think this is affecting the frequency response of the Mic? In other words would the Mic still be flat as the specs say in your opinion? There is no way to turn off the phantom power supply in the Marantz. Thanks for your opinion.ChrisHope you don't mind being my personal audio consultant

Subject: Re: Thanks Wayne, One more question if I may...
Posted by Wayne Parham on Mon, 12 May 2008 17:46:37 GMT

That's a good question. I think I would ask Behringer directly. The link below has tabs for FAQ (Answers) and a direct contact (Ask a Question). Maybe fire off a question to them in the "Ask a Question" tab and see what they say about your microphone.Please write back and let us know what they say. I'm sure others will run into this as well, because 5v and 12v supplies are common as well 15-30v.
Behringer Support

Subject: Re: Thanks Wayne, One more question if I may...
Posted by Mr Vinyl on Tue, 13 May 2008 19:37:51 GMT

Wayne,You asked me to post Behringer's response so here it is. Unfortunately they weren't much help. Here is what they said:Hi,and thank you for writing to BEHRINGER technical support! You're correct, the ECM8000 is designed to be used with a phantom power source as low as 15V. We don't have any information regarding how the ECM8000 will function with less then 15V. It doesn't sound all that far off in theory, but basically it's not within the specified range of the mic that we know WILL work well.

Subject: Re: Thanks Wayne, One more question if I may...
Posted by Wayne Parham on Tue, 13 May 2008 23:04:21 GMT

Well, they are confirming it's below spec. So I think you should expect the possibility of a performance penalty.