
Subject: Microphone Interface

Posted by [gofar99](#) on Fri, 04 Jan 2013 21:12:55 GMT

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Hi Everyone, I recently got a calibrated microphone for doing audio measurements. Unfortunately, I had no way to connect it to anything. So after doing a bit of a search on what it really needed to work I built a small interface for it. The microphone requires a phantom power source between 15 and 48 volts and has a 200 ohm balanced output. I used a standard wall wart that gave out 32 VDC no load. It was rated for 24 VDC, but the drain is so small that it was able to deliver the full 32 volts. The schematic shows how an AC wall wart and rectifier could be used. The number of sections in the filter is probably excessive, but I like to be sure the DC is clean. Yes I know that a phantom powered microphone should be able to reject PS crud, but I want to be sure what I measure is not contaminated by PS junk. The matching transformer is from Edcor and is under \$7. It has excellent specs (20-20KHZ) and is well suited for this application. The box is an ABS type and also inexpensive. Build is not complicated or critical as the impedances are low. It might be sensitive to nearby EMI sources so a metal box might actually be better. I can feed the output into either my laptop running TrueRTA software or into the Velleman PC based DSO on my main PC. Results agree with previous ones made on cruder gear.

File Attachments

- 1) [IMG_0415e.jpg](#), downloaded 3268 times
 - 2) [IMG_0416e.jpg](#), downloaded 3262 times
 - 3) [IMG_0417e.jpg](#), downloaded 3252 times
 - 4) [Microphone Interface 3 Jan 2012.png](#), downloaded 3269 times
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