

---

Subject: Re: sensitivity: conversion of units

Posted by [Earl Geddes](#) on Wed, 08 Jun 2005 16:49:52 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

I can tell you how, but I don't have time to work out the details. The % times the input watts tells you the watts radiated as sound. At one meter these watts would cover an area of  $4/3 \pi R^3$ . The radiated watts are "proportional to"  $\text{Pressure}^2 / \text{unit area}$ , with the area of the sphere as noted. So multiply the radiated watts by the area of a sphere at 1 meter and you have  $\text{pressure}^2$  (within some constants). From this you can get the dB with a log and some more constants. You can look up the constants.

---