# What is dB? Learn about Decibel units of level of sound intensity

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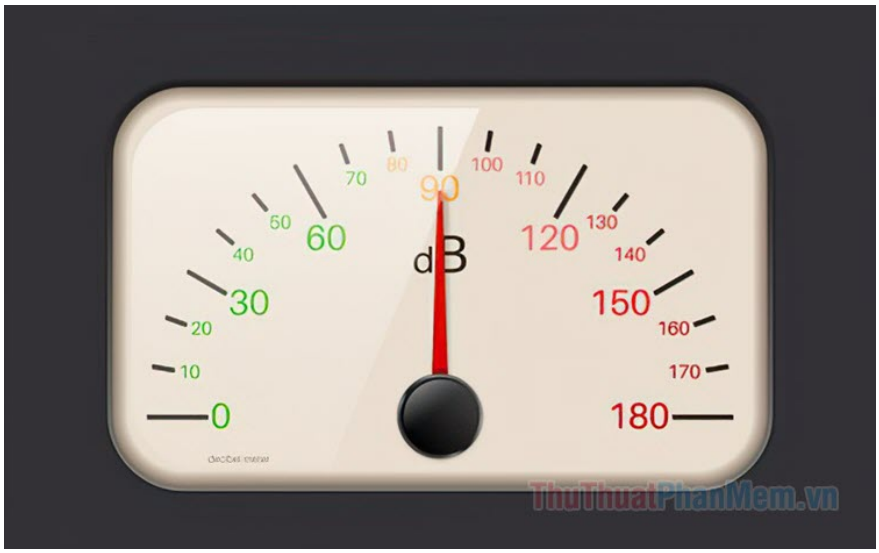
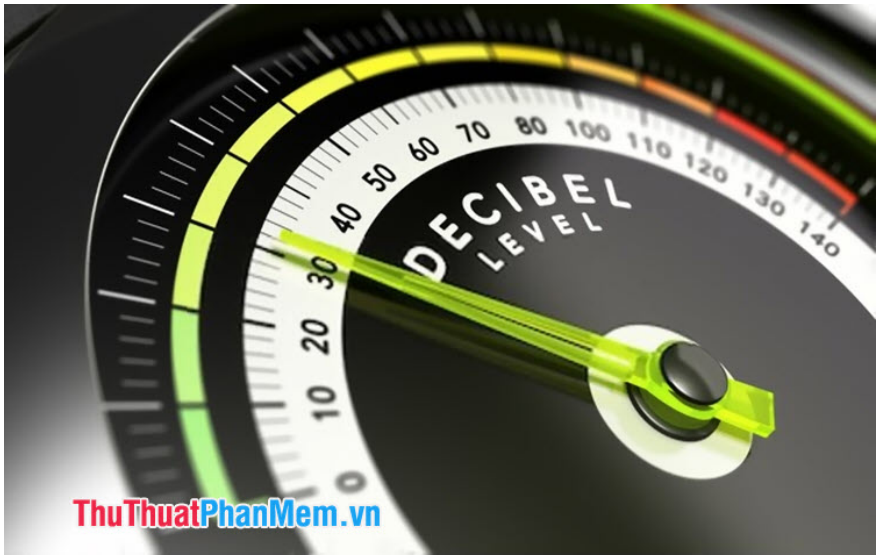


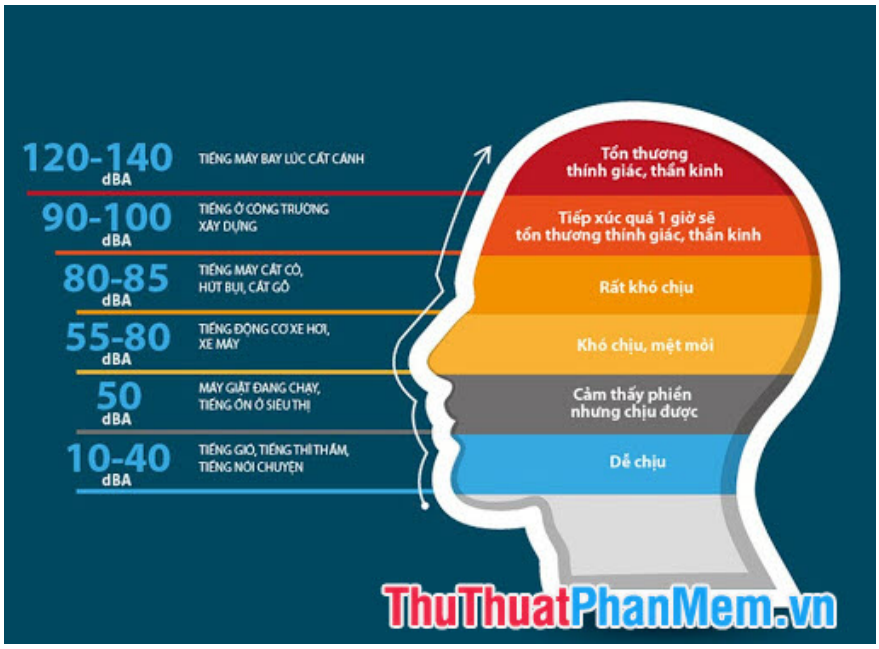

## 1. What is dB?




**dB** stands for **Decibel** - a measure of sound intensity based on the nature of the human ear. With this sound level, we have an inaudible sound level of 0dB and a jarring sound level of about 140dB.

The human ear can hear sounds between 0dB and 125dB. The most suitable and easy-to-hear sound intensity ranges from 40dB to 105dB. If it is smaller than 40dB, we will be hard to hear, the intensity is above 105dB causing discomfort to the ears and hearing the sound intensity of over 115dB will cause permanent hearing damage (deafness).

## 2. Learn about Decibel - unit of sound intensity measurement




In the field of electromagnetic audio, we often encounter two common units: power ( **W** ) and Decibel ( **dB** ). To convert how much power W is in terms of how many dB we use logarithms to calculate and multiply by 10 to give dB.

*Example 1:* 100W of power equal to how many dB?

***log 100 = 2 x 10 = 20 dB***

*Example 2:* How much dB is 200W?

***log 200 = 2.3 x 10 = 23dB***

- attenuation of sound intensity (dB) by distance:

**Distance (m)**

first

2

4

8

16

32

sixty four

**Attenuation (dB)**

0

-6

-twelfth

-18

-24

-30

-36

- Decibel intensity corresponding to the appropriate environment.

**Decibel intensity (dB)**

**Surroundings**

0dB

quiet

10dB

Human breathing

20dB

The sound of leaves falling slightly

30dB

The sound of leaves falling in a thunderstorm

40dB

Whisper voices in the ear

50dB

Soundproof cinemas

60dB

Normal office work, computer keyboard typing

70dB

Bustling cafes, supermarkets .

80dB

The sound of motorbikes and cars on the road

90dB

Sounds of industrial machinery such as excavators, mixers .

100-110dB

Sounds in Rock show

120-140dB

The sound of an airplane engine when taking off, an ambulance horn, an AK gun fire .

With the sharing of Decibel in the article, readers can understand about this common unit of measurement and the significance of Decibel in human life. If you read any questions or suggestions for the article, please leave a comment for TipsMake.com at the bottom of the article!