Representing sound

Sampling rate: how many times a second a sample is taken

Sample resolution: the number of bits used to store each sample

file size = rate x resolution x seconds

Representing sound

file size = rate x resolution x seconds

A 3 minute (180 secs) audio file using 16 bit sampling resolution at 44.1kHz sampling rate.

file size (bits) = 44,100 x 16 x 180

Representing sound

file size (bits) = 44,100 x 16 x 180

= 127,008,000 bits

In Bytes?

kiloBytes?

MegaBytes?

Representing sound

file size (bits) = 44,100 x 16 x 180

= 127,008,000 bits

In Bytes? = 127,008,000 / 8 = 15,876,000

kiloBytes?

MegaBytes?

GigaBytes?