

DSP Lab Demo2 Ex5

Comments

(a) Is there any noticeable effect of a lower number of bits/sample on the sound quality (keeping the same number of samples/second)?

Yes, it's pretty noticeable. 8 bit version sounds noisier, with a rough and distorted texture. It stands out especially in quiet parts.

(b) If yes, then try to explain the reasons?

The size of the quantization step increases with smaller bits. The rounding errors are larger, so it sounds noisier.