AUDIO NORMALIZATION USING LOUDNESS

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Abstract. It has been long time since the peak normalisation paradigm for audio recording industry has been imposed. As a consequence, there has been an ever increasing tendency to apply excessive upwards compression to pop music recordings, reducing severely the dynamic range. Another consequence has been an increment of the perceived loudness of commercials with respect to movie programs in television. The recent EBU-R 128 Recommendation intends to change this paradigm in favour of a new one in which peak normalisation is replaced by loudness normalisation. Loudness is measured by means of a new K-weighting filter that replicates equal loudness contours at a relatively high sound level. In the present paper a comparison between the K loudness and the classic model of psychoacoustic loudness is first performed. Then a comprehensive corpus of commercial recordings is studied as regards average, peak and minimum levels, and K loudness, attempting a classification according to music styles or programme type