The following Matlab function was taken from Queen Mary University of London, Center of Digital Music website [1] :
(http://c4dm.eecs.qmul.ac.uk/audioengineering/compressors/index.html)
and modified according to the needs:

- GainComputer.m (original file: gaincomputerFF.m)

References:

[1] Giannoulis, Dimitrios & Massberg, Michael & Reiss, Joshua. (2012). Digital Dynamic Range Compressor Design—A Tutorial and Analysis. AES: Journal of the Audio Engineering Society. 60.