

The issue whether loudspeakers should be excited by a voltage or current signal is quite well comparable to a dispute that took place over a Current-Driving of Loudspeakers: Eliminating Major Distortion and Interference Effects by the Physically Correct Operation Method Writer Physically Correct Operation The dynamic cone driver is based on work originally described by Siemens (). But the industry took another road and has most Normalized Step Response. control u(t)) but it is also possible to impose a current i(t) into the loudspeaker voice coil as presented in Fig First of all, this paper describes a model of loudspeaker (voltage driven and also current driven) represented by a comprehensive set of data based on a minimal number of measurements The nonlinear effects of electrodynamic loudspeakers are investigated as regard the influence of the changes of their main descriptive parameters values and non linear effects due to voltage and current-drive are compared highlighting the advantages of an apt current-controled policy Consequently there is a There are a number of ways of having the electrical signal exert forces on the diaphram, but by far the most common is the "dynamic" loudspeaker, in which an electrical current flowing through a coil of wire which is immersed within a magnetic field is used By observing the relative difference ΔTHD between the distortion attenuation of a loudspeaker controlled by voltage compared to the current driven loudspeaker, it shows that this difference is significant for the woofer and also for the bass-midrange loudspeaker The Era of Direct Current. (system reference efficiency) is the reference efficiency of the driver operating with the particular value of air-load mass provided by the system In his book "Current-Driving of Loudspeakers", subtitled "Eliminating Major Distortion and Interference Effects by the Physically Correct Operation Method," author Esa Meriläinen challenges the conventional wisdom of driving loudspeakers from amplifiers that are voltage sources Moving-coil loudspeakers generally provide a substantial improvement in linearity when current driven, together with the elimination of voice-coil heating effects. The issue whether loudspeakers should be excited by a voltage or current signal is quite well comparable to a dispute that took place over a century ago, concerning whether the production and distribution of electricity should operate on direct or alternating current Modelling the loudspeaker using voltage current driving principle Voltage driving is the common technique (i.e. The seminal paper on the modern form the cone driver has taken is that of Rice and Kellogg A loudspeaker comprises transducers converting an electrical driving signal into sound pressure, an enclosure working as a holder for transducers, front baffle and box to First of all, this paper describes a model of loudspeaker (voltage driven and also current driven) represented by a comprehensive set of data based on a minimal number of High Performance Loudspeakers. Low-frequency System Analysis: Room Environments and Theory, which focuses on moving-coil motor systems and Systems and With this book, the author succeeded in convincing me that for loudspeakers, current drive is, in theory, superior to voltage drive. The Era of Direct Current.