3rd Year Individual Project Initialisation Document

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October 15, 2019

1 Introduction

This is the introduction.

2 Project Brief

At nearly every stage of audio reproduction, there exists an element of feedback, to ensure that any equipment that drives the output signal responds as linearly as possible, to attempt to represent as transparently as possible the digital encoding of the original sound. However, the loudspeakers that are used to actuate the air around the listener are nearly always run without such feedback in place. This leads to one of two scenarios: a cheaper loudspeaker that distorts easily and has substandard frequency response, or a loudspeaker that handles most, if not all, frequencies within the human hearing range well, but is unreasonably expensive.
The aim of this project is to explore methods of collecting feedback signals from the output of a voice coil loudspeaker, and feed them into the input to the voice coil to try and drive the loudspeaker as linearly as possible.

3 Background Theory

Delve into background theory.

4 Results

These are the results.