# Audio Amplifier and Comparison

# Introduction:

Audio Amplifier is the reproduction of Input Audio Signals into our Desired output Audio Signals. In this model we can compare two same songs signals but in difference language and can see their frequency, audio Low pitch and high pitch differences in between them. We can also hear audio from the songs where we can change song using manual Switch into Telugu and Hindi song.

# Requirements:

## High Level Requirements:

1) It shall provide Amplified Audio.

2) It shall Compare Two Different Audio signals

3) It shall give Audio output

## Low Level Requirements:

1) We can amplify the Audio

2) It shall provide compared audio signals

3) It shall save the audio

# Applications:

* Audio amplifiers are used in Hi-fi devices, Home audio systems.
* It can be used in Radio wave Transmitter to send signals for one place to another place.
* It can be used to analyze two different audio signals.
* It can even be used in military as an acoustic weapon.
* It is used in tape recorder, CD players, VCRs, DVD players, etc.
* It can use to mimic voice or in talking toys for children.

**SWOT Analysis:**

**Strengths:**

* It has wide frequency response and large bandwidth.
* It is most convenient and least expensive
* It provides high audio fidelity.
* It has low amplitude distortion.
* It provides low frequency distortion

**Weakness:**

* It has a tendency to become noisy with age especially in moist climate.
* The Quality of sound is Low

**Opportunities:**

* Deals increment of worldwide application of products.

**Threats:**

* Failure of Machine

# 4 W's and 1 H:

## What:

* It can able to amplify the sound and compare two different audio signals.

## When:

* This type of applications can be used when we need to compare two audio signals or to modify the audio output.

## Who:

* It is useful for customers or owners.

## Where:

* It is used mainly by movie makers, military etc.

## How:

* It is implemented with the help of MATLAB software

## ****Flow Chart:****

## E:\MathWorks\Project\Block Diagram.png