Project Proposal

Simple Audio Amplifier

Members:

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Description:
An Audio Amplifier is simple yet very useful in many ways. Audio amplifiers help us hear very low frequency sounds from radio stations or even from the transmitted signals through a headphone jack.

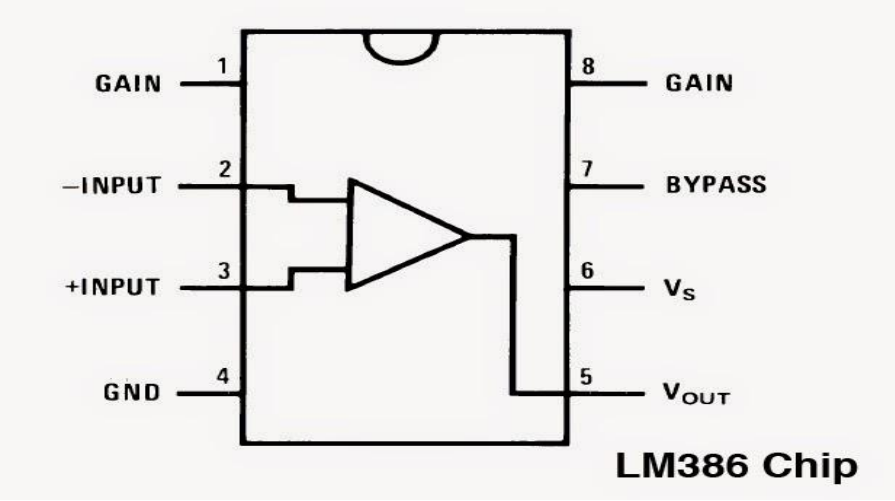
An Audio amplifier receives a signal of audio from the input device, which can be anything like headphone jack or even radio towers and convert those weak signals into more powerful and increases the sound's frequency. The frequency is the reason behind how loud a sound can get and an audio amplifier simply amplifies the frequency.

Important Components:

1. **Audio amplifier IC:**

   These ICs are very cheap yet very useful. It has 8 pins and it converts the weak sound into loud sound. These ics depend on the amount of power they can produce as output sound.

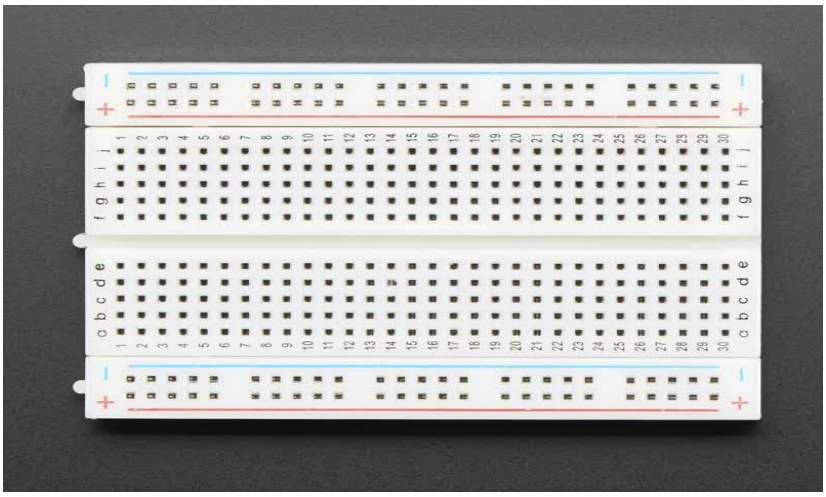
   A picture of the pins and overall design of the LM386 IC.



2. **Breadboard:**

It is like the main area where all the connections are made and connected. It allows the connections among various other components that we would be using in the project.

A simple breadboard can be seen in the picture attached below



3. **Audio Jack:**

It is the device that will act as the carrier of the low frequency sound and transfer it to the Audio amplifier IC through the connections of the breadboard. It will also be connected with other components to ensure the proper and efficient supply of the power.

A simple Stereo Audio Jack

4. **Capacitors**:

   A Capacitor is a device that stores electrical energy in an electric field. It is a passive electronic component with two terminals. The effect of a capacitor is known as capacitance. Capacitors ensure the proper supply of the electricity.

   Various capacitors with different capacitance.

5. **Power Supply:**

   We talked about giving the power to the ic and overall components, but the main power will be given through one of the power supplies. These are batteries which give the power to ensure the proper functioning of the device.

   An example of a simple 5v power supply battery

NOTE: There can be a lot of other components like resistors, potentiometer and not to mention jumper wires. We would add those if they are required when the actual assembly of the project is done.

THE END