Location driven car music player (Plays devotional songs near temples, shuts at home etc..,)

The main purpose of the project is to play different music's in a car depending upon the location. For example, if we are traveling in a car when we are near the temples then automatically devotional songs will be played or when we are at theatres then movie songs will be played like this the songs will be played depending upon the location.

The location identification is done by the use GPS Receiver. The GPS is the acronym for Global positioning system. This GPS receiver is capable of identifying the location in which it was present in the form of latitude and longitudes. The GPS receiver gives the data received from the satellites.

The device is designed such that the GPS send the data related to the location in which it was present and it is given to microcontroller. Microcontroller is an onboard computer consisting of input and output ports. The microcontroller compares the values obtained from GPS receiver and operates accordingly on the music player depending on the location. Depending upon the location the microcontroller decides which music it has to play. The Microcontroller is programmed using Embedded C language.

The major features of this project are:

1. Location driven circuit.
2. Automatic music player control.
3. Easy to use and portable.

This project provides us learning's on the following advancements:

1. Serial communication using RS232 protocol.
2. Embedded C programming.
3. Conversion of AC supply to DC supply.
4. PCB design.
5. Interfacing the GPS with the controller.
6. Interfacing Music player with a controller.

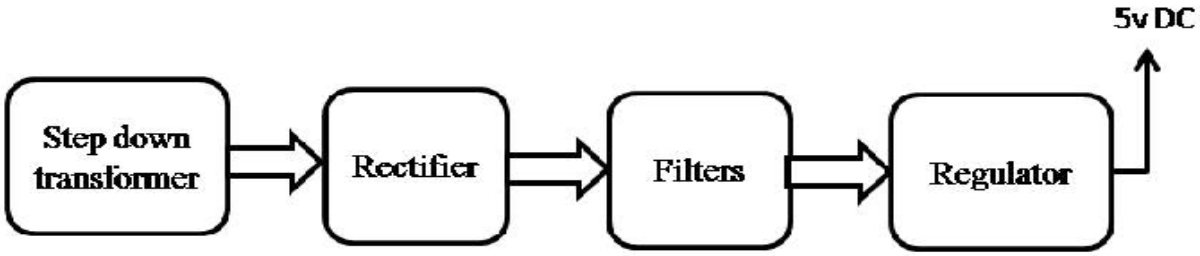
The major building blocks of this project are:

1. Regulated Power Supply.
2. Global Positioning System.
3. Micro controller.
4. Crystal Oscillator.
5. LED indicators.
6. Reset.
7. Relay with driver (interfacing circuit).

Software's used:

1. PIC-C compiler for Embedded C programming.
2. PIC kit 2 programmer for dumping code into Micro controller.
3. Express SCH for Circuit design.
4. Proteus for hardware simulation.

Regulated Power Supply:



Block diagram

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