

Virtual wireless dancing bells for classical dancers

The main aim of this project is to provide wireless virtual dancing bells for classical dancers. In this project the dancers will be wearing a MEMS ACCELEROMETER SENSOR device which looks like a belt to their legs and these will send the signals to the microcontroller which is placed at speaker and the sound is controlled according to the movement of the legs and their vibrations. The device can be switched off when the dancers are moving to the stage or back stage as it will be a noise.

In this project we use MEMS ACCELEROMETER SENSOR sensors and one microcontroller, MEMS ACCELEROMETER SENSOR are highly sensitive sensors used to sense the movement of the legs and their vibrations and sends the information to the microcontroller, which is programmed to receive the information from the MEMS ACCELEROMETER SENSOR and controls the speaker sound accordingly. This will be the functioning of the device and can be ON/OFF using control button.

Features:

1. Easy to handle the device.
2. This device is of less weight.
3. User friendly can be easily operated.
4. Decreases sound pollution.

This project provides us with the learning's on the following aspects:

1. Characteristics of MEMS ACCELEROMETER SENSOR
2. Interfacing MEMS ACCELEROMETER SENSOR with Microcontroller.
3. Embedded C programming.
4. PCB Design and development

www.mycollegeproject.com

Ph: +91 9490219339, 040-24536100

A-8, 2nd floor, Eureka court, beside Image hospital, Ameerpet, HYDERABAD – 73.

Santoshnagar: Opp: Magna Hypermarket, Santoshnagar X-Roads, HYDERABAD – 59.

The major building blocks of this project are:

1. Interfacing MEMS ACCELEROMETER SENSOR with controller
2. Interfacing speaker with the controller.
3. MEMS ACCELEROMETER based sensor.
4. Microcontroller based control system with regulated power supply

Block diagram:

