

# **“DUAL MODE AUTOMATION SYSTEM”**

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Under the supervision of Mr./Ms. Abhinav Kumar (Electrical Department)

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## **Introduction**

This is “Arduino” automation based project. The project totally works on wireless remote switching. It works on RF(radio frequency) and Bluetooth TTL(Transistor -transistor logic) system. The main architect of the project is based on Arduino. Arduino is the opensource hardware, which consists of Atmega 328 microcontroller. The specialty of this Atmega 328 is that it works on the 16 MHz crystal. The switching speed and processing speed of the microcontroller is very much efficient as compared to the other microcontrollers. This microcontroller is programmed for controlling 3 output sources. The programming of the microcontroller is based on “C” (programming language). This project is also having an extra wireless communication source i.e. radio frequency (RF) communication.

It can also be controlled wirelessly through Bluetooth and RF. The project can operate from 2 to 4 Amp rating appliances. It consists of a dc power source for the controlling of the microcontroller and external 240 VAC power source is required.

This project is very much helpful for controlling any appliance wirelessly.

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## **CONCLUSION/ FUTURE IMPACT**

- The main purpose of making this project is that we can get wireless switching anyhow whether we are having a Bluetooth connectivity or RF connectivity.
- This project solves the problem of manual switching.
- This project can be operated not only through RF but also from Bluetooth.
- The range of the RF is about 150 meter in close area and 500 meter in open area.
- This is a very convenient project.
- This project changes the controlling of the appliances.
- This project can also be used for the determination and controlling of industrial equipment which reduces the effort of man.



## GROUP TEAM



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