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*Project Report on*

**“Power-line Voice Communication &  
Device Control using Microcontroller”**

*Submitted in partial fulfilment for the award of degree of  
Bachelor of Engineering*

by

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## **INTRODUCTION**

The aim of the project “POWERLINE VOICE COMMUNICATION & DEVICE CONTROL” is to provide voice communication and device control within a building or between two nearer buildings as using power line is a very practical means. They are very practical and economical since no extra wiring is needed between two points. Instead they use the mains line to pass the signal. Since FM is used, the noises and interruptions present in the power line do not affect the clarity of the audio as well as controlling signals.

### **1.1 FIELD OF DEMONSTRATION**

This invention relates to the field of communication technology, and more particularly, to showcase usage of a single medium of communication for different purposes.

### **1.2 BACKGROUND**

Audio wire carries music. Coaxial cables carry TV signals. Ethernet cables carry Internet & computer data. Telephone lines carry telephone signals. But in contrast, power lines carry electrical power as well as audio, video, voice and data signals.

So by using power lines for various purposes, the need for exclusive and dedicated cabling can be avoided.