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**FINAL REPORT OF DIPLOMA PROJECT**

**REMOTE CONTROL USING TELEPHONE**

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## **ABSTRACT**

Remote control using telephone is a device that enables switching 'on' and 'off' of appliances through telephone lines. It means that we can switch appliances in any distance from our home.

The purpose of this project is to enable the user to switch appliances although they are not in home. It can be done by dialing their home phone number to switch off the appliances without returning back to their home. Appliances can be selected by pressing pre-programmed button.

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## CHAPTER 1

### 1. INTRODUCTION

#### 1.1. Background of the Project

Teleremote circuit enables switching 'on' and 'off' of appliances through telephone lines. Therefore, the objective of this project is to make use telephone to switch appliances from any distance.

By using telephone as remote control, it overcome the limited range of infrared and radio remote controls. The circuit described here can be used to switch up to nine appliances (corresponding to the digits 1 through 9 of the telephone key-pad) by using Dual-Tone Multi-Frequency (DTMF) signals.

The DTMF signals on telephone instrument are used as control signals. Thus the telephone can be used to switch on or switch off the appliances also while being used for normal conversation. The circuit uses IC KT3170 (DTMF-to-BCD converter), 74154 (4-to-16-line demultiplexer), and five CD4013 (D flip-flop) ICs.