

AUTO DIAL ALARM TELEPHONE SYSTEM

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ABSTRACT

The most vital aspects in life is communication. In line with vision 2020, the most sophisticated, reliable and smooth communication tool is needed. My project is the implement of such system.

The technology introduced here is about automatics communication via the ordinary telephone line. This system uses LS6802 microcomputer. Chapter 2 outline the main characteristics of this microcomputer.

The project is divided into 4 parts. Firstly, chapter 3, the Auto Dial Telephone, then chapter 4, the Tone Decoder. Thirdly, chapter 5, is the Waveform Generator. Finally, the combination of the three parts, in chapter 6. The division is necessary in order to make it easier for better understanding.

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1.0 INTRODUCTION

The Auto Dial Alarm Telephone System introduced in this thesis has the hardware and software features of a sophisticated security system. Once the sensor detects any changes, the microcomputer will immediately dial the respective telephone number. For example, if the programmer programs the microcomputer to dial place A as sensor number 1 is activated, then on activation of sensor number 1, the dialing to place A will be done automatically. On the earpiece of the system, the busy tone or ringing tone is detected. If it is the ringing tone, then the system will wait for someone to answer the phone. It will then transmit the appropriate signal in series of 8 bits.

On the other hand, if the signal received at the telephone earpiece is the busy tone, then the system will proceed by dialing another place. It will keep on dialing for different numbers of places until the signal received by the earpiece is the ringing tone. Thus in doing so, this device allows a quick response in any case of emergency.

This project is divided into four parts. There are :

1. **AUTO DIALER** - To make the phone dial a specific number automatically once the sensor detects any changes. A number of modifications has to be made to the ordinary telephone set.
2. **TONE DECODER**- To detect the ringing tone and the busy tone of the telephone system. This is necessary for the microcomputer to decide whether to dial another number or to wait for someone to pick up the telephone.