This is the report of the final year project entitled 'The Design and Implementation of a Key Finder', which is part of the requirement of the 3+0 B.Eng (Hons) Communication and Electronic Engineering program.

The **KEY FINDER** is a user-friendly homing device, used to locate lost keys or remote controls via an audible sound. This project is divided into the hardware and software part. The hardware part consists of a transmitter or a control unit and three receiver units. The main part of the transmitter is the PIC16F874A, which is programmed to control the LCD, the keypad, battery indicator, the transmitter circuit and holds information of the receivers.

The LM567 tone decoder is the vital part of receiver unit, which decodes the audio frequency transmitted user to by the control unit. Each receiver is preset with a particular audio frequency, and when the transmitted signal matches the preset frequency a buzzer is triggered.

The software enables the PIC16F874A, 40 pin microcontrollers to perform effectively. The programming language chosen is Basic, as the PIC used is a PICAXE.