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FINAL REPORT OF DIPLOMA REPORT

INFRARED CORDLESS HEADPHONE

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ABSTRACT

A Infrared Cordless Headphone project is design here is to reproduce audio from TV without disturbing others. It does not use any wire connection between TV and headphones. In place of a pair of wires, it uses invisible infrared light to transmit audio signals from TV to headphones. Without using any lens, a range of up to 6 meter is possible. Range can extend by using lenses and reflectors with IR sensor comprising transmitters and receivers. Here an audio amplifier is to provide signal amplification to the level where it can be heard through a headphone. For maximum clarity, we must adjust the pot meter, VR2. Direct phototransistor towards IR LED of transmitter for maximum range. A 9-volt battery can be used with receiver for portable operation. This Infrared Cordless Headphone was design with a basic design, the first objective for that is to use Infrared Cordless Headphone without disturbing when it comes to someone pleasure of enjoying music or heard information from TV.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Infrared cordless headphone is one of the modern products to apply in our life. It can make us heard the voice from the TV very clear without any wire. This project must be connected to electric product likes TV or other similar like it.

In Infrared Cordless Headphone project, cordless and headphone to make sure it can operation will successful. It is one combination to get the output~ voice clarity.

Generally, infrared is used to transmit and receives audio signal from TV to headphone. Besides that, this is a cordless circuit and easy to use. The headphone is used to receive the voice from the television through infrared light from the transmitter circuit to the receiver circuit and lastly the output will be produce at the headphone.

Basically, our project consists two simple electronic circuit, first audio transmitter and second audio receiver. The transmitter circuit is put beside TV and the audio socket is impaled to the TV and the audio output at the transformer is connected in reverse and transfer at series IR LEDS. Meanwhile, receiver circuit put is at the headphone. From series LEDS (audio transmitter), IR phototransistor received the infrared light and then signal ~ voice from TV will be heard at the headphone. Besides that, the variable resistor is used to control the clarity tuning. Switch as to ON and OFF the headphone.

For conclusion, this project is a quite simple, easy to built, need low cost, suitable and comfortable.