DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

FINAL REPORT OF DIPLOMA PROJECT

SMART CLAP SWITCH

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ABSTRACT

In today's world, digital is term that uses in much type of products. This is because of the dramatis way that all digital circuit and also digital technique in making the used of product to make human life easier and comfortable. And this is why the 'Smart Clap Switch' is produced.

The function is still like the ordinary clap switch but the different is that this circuit will detect and only be operates when there is four continuous clap within an interval timing. It becomes completely different from normal clap switch because it certain unique features.

The circuit is connected to the device selected, such as lamp or table fan, at the output and will 'on' and 'off' only when the claps produce. The special feature is that it prevent from the device being 'on' by itself with a single strong banged from a door or shouting person. The used of the condenser microphone at the transducer section produced the electrical signal to the buffer and then pass a few sections such as, the highpass filter and amplifier, comparator, main control and the relay driver. Finally connected to the device that to be controlled.

CHAPTER 1

INTRODUCTION

1.1 Background

Circuit of a smart clap switch incorporating certain unique features, which is present in our circuit. It overcomes the shortcomings observed in normal clap switches because the normal clap switch needs only a single clap to switch 'on' or 'off' but this smart clap switch requires 4 claps alternately to 'on' or 'off' the device.