

SAFETY GAS STOVE DEVICE

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A project report submitted in partial fulfilled of the requirements for the award of the degree of Diploma of Electrical Engineering (Electronics / Telecommunication / Instrumentation / Computer)


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MARCH 2015

DECLARATION

“We declare that this report entitled “SAFETY GAS STOVE DEVICE” is the result of our own group research except as cited in the references. This report has not been accepted by any degree and concurrently has not been submitted in candidature of any other degree”.

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ACKNOWLEDGEMENT

Alhamdulillah, thanks to God and His blessings, we have succeeded our Final Year Projects 2 for diploma courses in Electrical Engineering (Electronics / Telecommunication / Instrumentation / Computer). To start, we want to thank to our supervisor, Puan Ummu Umairah binti Mohamad Ali, who have been advising us to do our best with her brilliance and patience in helping and supporting us during the progression of Final Year Project 2. To our parents, thank you very much for their support and very understanding, especially in providing budget for us to buy electric components. Also, thanks to our friends, lecturers and those who helped us throughout the course of this project completion. Without all of their helps and supports, we would not complete our project until the end of the exhibition.

ABSTRACT

Stove is a cooking tool that important for cooking lover . For cooking lover, stove is the most important tool in their kitchen. But stove that always being used not being fully equipped by safety devices. That why there always heard about fire accident report everyday, many accident can happen in kitchen or starting from kitchen. Fire , gas explosion, splash hot oil can happen in kitchen. According to statistic, the rate of death cause by fire from gas leakage increase from 76 cased in 2010 to 89 case in last year. Many house caught by fire because user not forgot to close their stove to go somewhere else. This accident can cause the hose occupant suffer a financial loss or the most brutal thing loss a life. The main component in this project is PIR sensor that can detect movement in the kitchen. When the sensor detected movement, it will activate the circuit to energize the solenoid valve. The solenoid valve will open when circuit being activate. But, PIR sensor not just detected human movement. Therefore, buzzer being used. Buzzer will act as a reminder. When there still gas flow, it will make a sound. So, if there other movement beside human in the kitchen, the solenoid gas valve may be still open. That why we use the buzzer to keep the user inform. So the user will be know that the stove still open. Other than that, we have a flip-flop circuit that act as manual switch. Therefore, we can open and close solenoid valve manually.

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