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FINAL REPORT OF DIPLOMA PROJECT

WATER SPRINKLER

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As we know that, many western engineers had created many things that can make people do their work easily. This factor makes us jealous and reattributed them based on their magnificent ideas. Although, our project is simple, we manage to gain knowledge about how Water sprinkler functions.

Other than that, we also would like to give special thanks to our family because of their concern and support in process to make our Final Year Project proposal until our project become successful. With their help also, we had overcome some our problems to make our project.

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ABSTRACT

The water sprinkler is a sprinkler system to water garden. This sprinkler system is designed with Infra-Red Remote Control Switch to switch ON the sprinkler system. This remote control use four IC, one IC is used at transmitter circuit; IC 4011 and three IC are used at receiver circuit; IC 567, IC 4013, IC 7805 to operate the remote control switch. Other than that, additional circuit is added to make the sprinkler system is more reliable when change in environment state is happen such as light to dark and vice versa. Nowadays all the people want to do something faster, beside to save time working even though have to waste some their money. That why this system was created to help the people without doubt to save time especially. By using this system, the people will not worry to do manually to water garden or plant even though has high technology motor to pump water through pipe and then water come out through rotary sprinkler. This sprinkler system will be activated if the switch at transmitter is ON and the receiver will receive signal that send by transmitter. The pump motor will activate and the sprinkler system is operating. When the transmitter is push to OFF, the sprinkler system also stop. Besides that, the pump motor cannot operate all overtime when people forgot to OFF the receiver by using transmitter. That why additional circuit is needed to avoid that problem. We insert light control switch between connections of receiver and pump motor. Light control switch circuit will CUT OFF the connection of pump motor to operate when detect dark state by using light dependent resistor (LDR). In other word, during the days the light control switch circuit is operating. At night, the light control switch circuit is not operating. As the conclusion for this project, the entire objective is achieved. The time and energy of people not to be waste by using this sprinkler system.

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