SELF – CONTROL PLANT IRRIGATION SYSTEM

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"I declare that this report entitled "*Self-Control Plant Irrigation System*" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

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ABSTRACT

Self-Control Plant Irrigation System is the project designed to help the people watering their plants properly especially who are working and living in the city. This project reduces the human interfering during the process of watering the plants. This project used the probes as a humidity sensor and as an ON/OFF switch to detect the condition of the soil on the plants. The hex inverter 7404 is used to give the complemented output from its input and the NE555 is used as a timing which depends on the soil condition. For example, when the soil on the plants is dry then the soil have high resistance, thus the current cannot flow to the input. By the help of hex inverter 7404, it will complement the input and the current can flow from the output while producing the high voltage (5V) to the output of inverter and it will trigger the NE555. So, the output that is generated from the NE555 will drive the relay to switch ON the water pump. The operation of this projects is opposite as the soil on the plants is in the wet condition.

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