

## ABSTRACT

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### **“PROTOTYPE OF AUTOMATIC TAP AND SHOWER USING MICROCONTROLLER ARDUINO UNO”.**

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**Keywords** : Bathroom, Automatic Tap, Automatic Shower, Arduino UNO, PIR Sensor, Servo Motor.

(xii + 33 + Lampiran)

Prototype Automatic Shower Faucet Based on Arduino Uno Microcontroller provides a choice of solutions in a practical era and as the development of science and technology, many ideas come in the digital and electronical science. Shower users have become commonly used as a complement to household appliances, but many available showers require power and do not work automatically in activation, so the use of this tool aims to design and simplify the conventional system into a simple shower tool that can work automatically by utilizing Arduino to regulate the shower work, the pear sensor instead of the faucet, and the servo as the input distributor of the sensor and the arduino into a voltage to activate the shower. The sensors detect human movement to turn on the shower in the bathroom. In general, the shower in the bathroom is still set by the faucet, so the user turns on and off the shower and manually set the heat cold. There are two conditions in this automatic shower that flowing water can be hot and can also be cold, but the heat that came out only 35 ° C. Prototype Automatic Shower Faucet Based on Arduino Uno Microcontroller works systematically to alleviate human tasks when want to enter the bathroom no need to look for the faucet to open the shower when bathing or shampooing. If there is no human movement in the shower valve shower will off by itself. From the results of this design, it is found that the performance of automatic shower prototype has worked well and pear sensor managed to detect human presence if humans are under the shower

Daftar Pustaka (2006-2017)