

DESIGNING AUTOMATIC WATER FILLER SYSTEM USING ARDUINO

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ABSTRACT

Water is one of the main needs for living things. For human, lack of drinking water can cause dehydration and diseases. The lack of water availability could be caused by the unreachable of water supplies. One of the tools used to facilitate the supply of drinking water is a dispenser. Dispensers commonly are used manually. However, this research aims to develop a new design of an automatic dispenser using infrared sensor dispenser to avoid spilled water. Arduino IDE with C language programming used as software. This program integrated with the water-pump with the infrared sensor as an indicator of the presence of a glass and the length of filling the water. The infrared sensor functions as an input while Arduino Uno microcontroller functions as microcontroller processing the input result delivered to water-pump as an output. The test showed that the automatic water filling dispenser using the Arduino Uno infrared sensor could automatically fill the glass according to a predetermined volume of water. It can be seen from the error percentage value for small, medium, and large glasses of 5.28%, 2.16% and 1%, respectively.

Keywords: *Water, Dispenser, Auto, Arduino, Infrared.*