Water Level Indicator

DEETYA.D.S,GAYATHRI.N.R

Department of Electronics and Communication Engineering

ABSTRACT

The drinking water crisis in India is reaching alarming proportions. It might very soon attain the nature of global crisis. Hence, it is of extreme importance to preserve water. In home based water tank, the one problem is very common to us that the control of water level of overhead tank ,as a result the wastage of water is increasing day by day. But we all know water is very precious to us. This problem can be controlled by a simple electronic circuit consists with some cheap electronic components, that circuit is called 'Water Level Indicator'. The operation of water level controller works upon the fact that water conducts electricity. So water can be used to open or close a circuit. As the water level rises or falls, different circuits in the controller send different signals. These signals are used to switch ON or switch OFF the motor pump as per our requirements. Water Level Indicator is a simple low cost circuit. First we introduced this circuit from the web. There the circuit is made with various components like transistors (BC547.BC548) Resistors, Leds and etc. After we discussed that how to make the circuit without transistors and after we calculate that we got the result, beside we got help from our teacher about this circuit. At last we got a simple circuit without transistor and it shows result. We removed the transistors to make the circuit cheap and easy installation to all. The other liquid control circuits, which we have seen those are very critical than this circuit.

Index Terms— Commercial, Most reliable, Water Level Indicator.

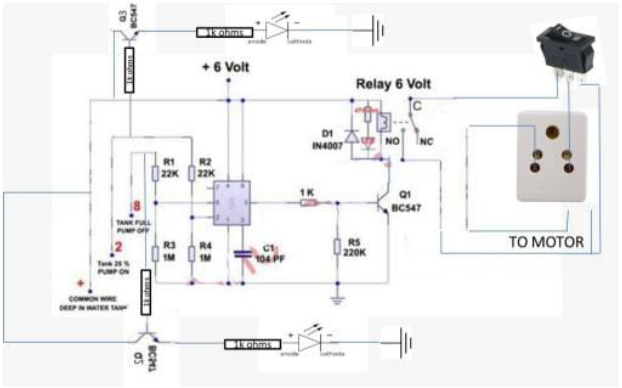
OBJECTIVE

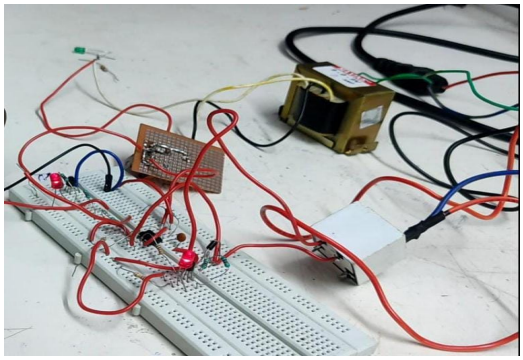
To make the most commercial and reliable water level controller using as less resources as possible. To study the controller model and observe its characteristics. To compare the controller with tank. As the water level continues to rise the conventional controllers available in market

PROPOSED METHODOLOGY

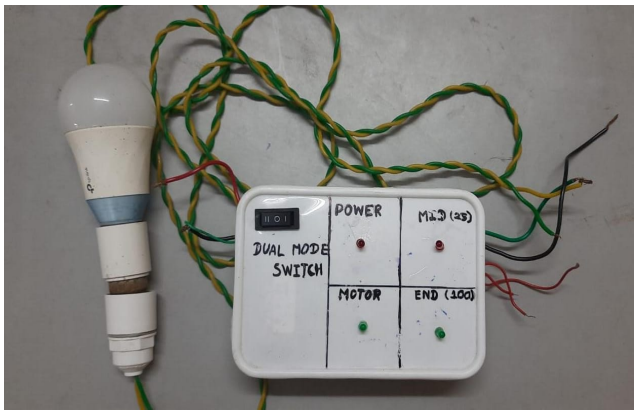
When water level increases and touches the sensor, the Red LED will glow indicating that there is water within the and reaches half the tank, Yellow LED will glow. When the water in the tank rises to full an alarm is made by the buzzer as an indication that the tank is full

BLOCK DIAGRAM





RESULT



CONCLUSION

The water level Indicator employs a simple mechanism to detect and indicate the water level in an over head tank or any other water container. The sensing is done by using a set of four probes which are placed at four different levels. We can conclude that this system is very beneficial in rural as well as urban areas. It helps in the efficient utilization of available water sources. If used on a large scale, it can provide a major contribution in the conservation of water for us and the future generations. In these days, when the Earth's reserve of consumable water is decreasing every moment, every drop has its value. Water level controller is a simple yet effective way to prevent wastage of water. Its simplicity in design and low cost components make it an ideal piece of technology for the common man.

REFERENCES

1. Fundamentals of Electronic circuit design – Hongsen Ma
2. Introduction of Electronics -Yatindra Nath Singh
3. https://en.wikipedia.org - Wikipedia
4 www.google.co.in –Google
5. Joydeep Kumar Chakraborty, "Water Level Controller"
6.RexNiedermeyer,"AquariumWaterPumps"

Rajalakshmi Institutions