

WATER ALARM USING IC-555

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AIM

To design and simulate water overflow alarm using 555-IC.

COMPONENT REQUIRED

- 555 timer IC
- Buzzer
- Resistors
- Capacitors
- Battery
- Connecting wires
- Breadboard

THEORY

- The circuit is based on an astable multi-vibrator wired around IC1 (NE 555).

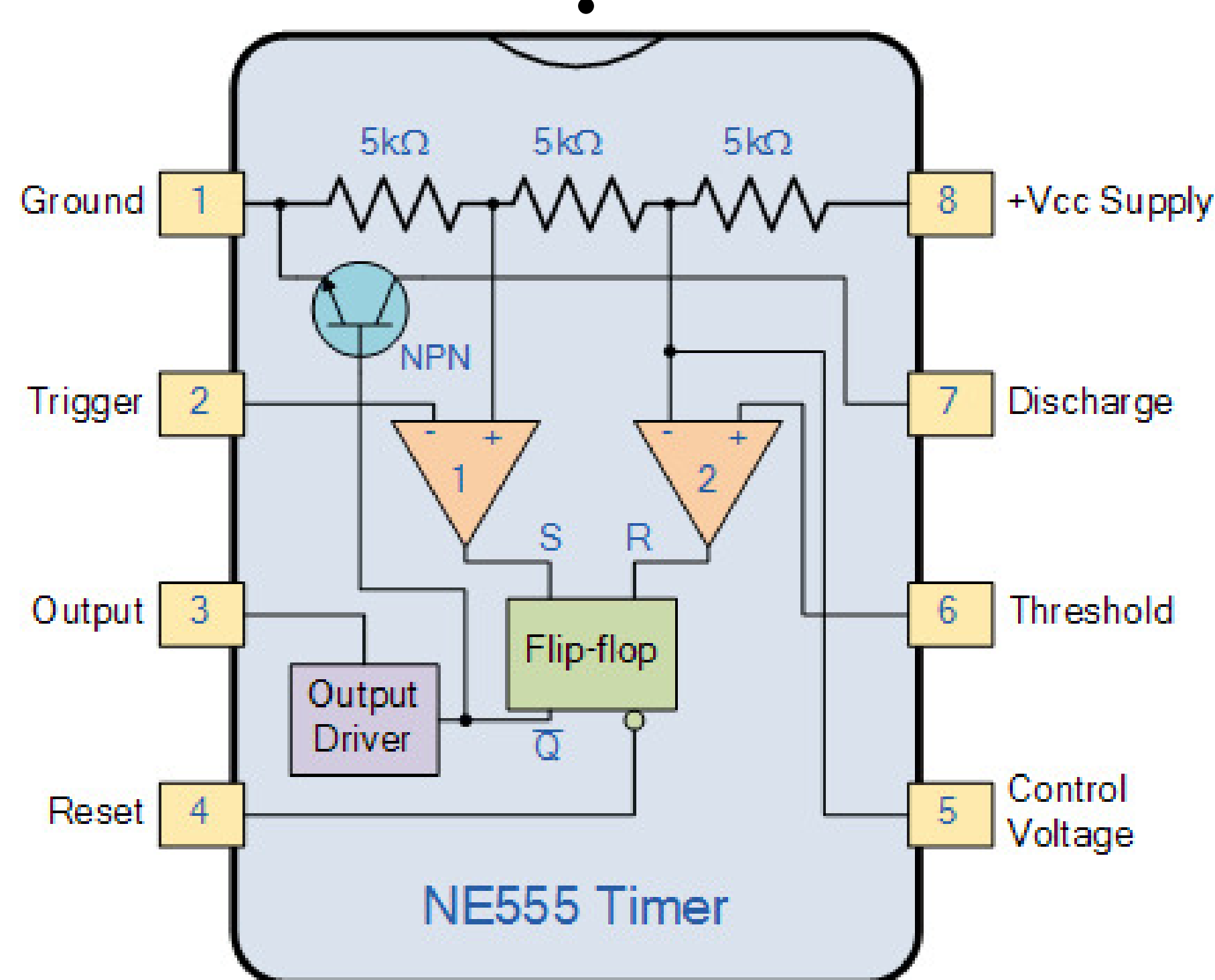


figure1. IC- 555 Pin Diagram

- Resistors
- Capacitors
- Battery
- Connecting wires
- Breadboard

CIRCUIT DIAGRAM AND WORKING

- The circuit for a water level detector is shown below. Pin 1 is connected to the ground.
- Pin 2 and Pin 6 are shorted and connected to pin 7 through 570 Ohm resistor.

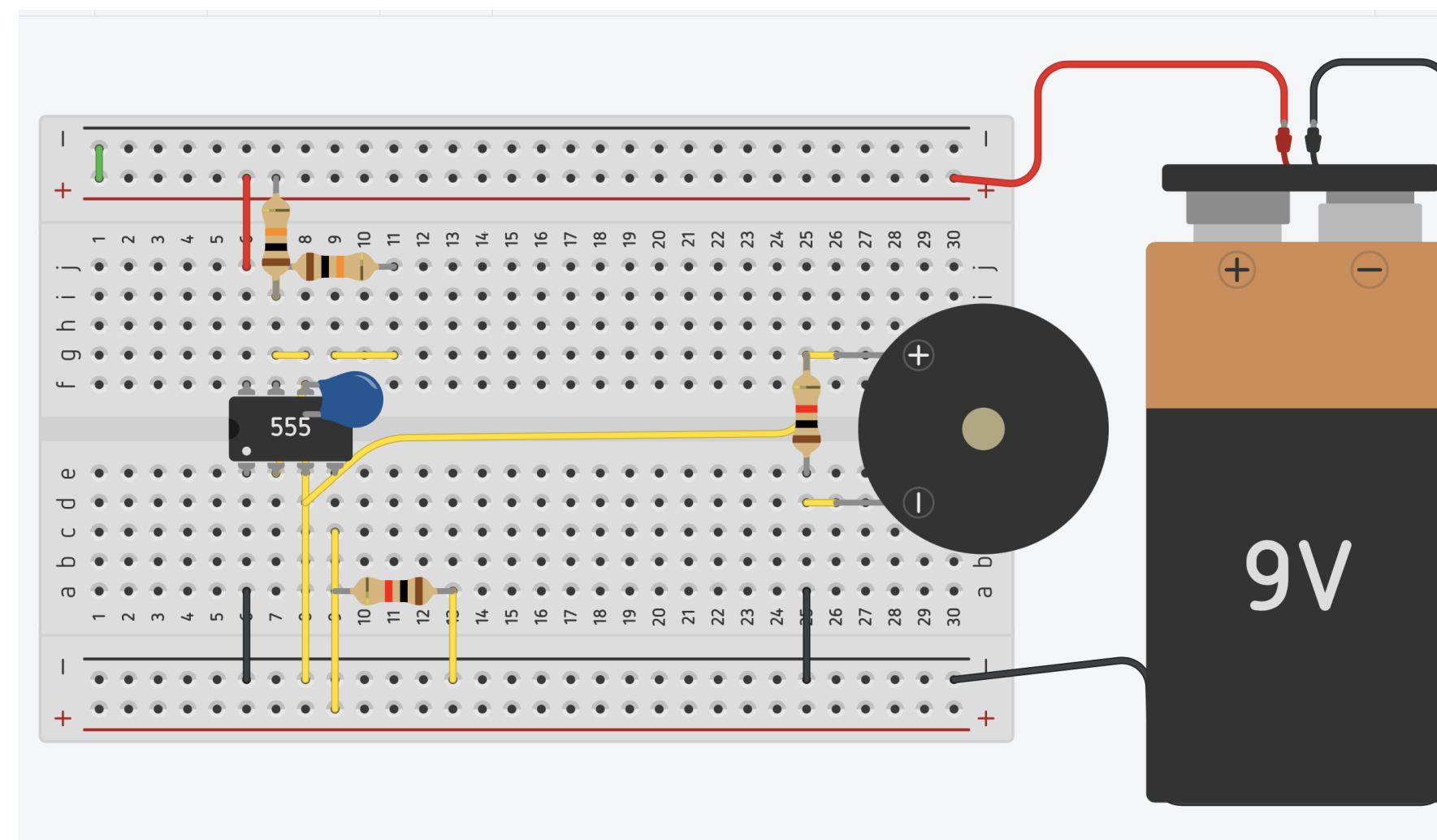


figure2. Circuit Diagram of Water Alarm

- Pin 4 is grounded through a 1K Ohm resistor.
- An electrolytic capacitor of 1 uF is connected to pin 6 and Ground. Pin 3 is connected to the buzzer's positive terminal, and the buzzer's negative terminal is connected to the ground.
- VCC (supply voltage) is connected to pin 7.

APPLICATIONS

- **POWER SAVER::** With automatic controllers, the electricity usage is limited as well as less water needed to regulate supply.
- **MONEY SAVER::** A water level controller helps save money by limiting the waste of water and electricity.
- **AUTOMATIC::** Water levels are maintained at the appropriate levels thanks to the automatic operations of these devices.

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of the task would be put incomplete without the mention of the people who made it possible, whose constant guidance and encouragement crown all the efforts with success. It is my greatest pleasure to thank Dr. TAPAN JAIN and Dr. GIRISH CHANDRA GHIVELA (Asst. Professor Electronics Communication Department) for his consistent guidance, expert academic and support throughout the project, without his great concepts, inspiration it would have been impossible. We are very thankful to Mrs. Deepika Sagne for his help in laboratory for practical guidance during this project. We are thank to all faculties who directly and indirectly helped us in the completion of this projects.

CONCLUSIONS

This is a simple model water level indicator which can be made at your home. This project is the solution to help the user to indicate water level in reservoir or into the water tank that indicated different levels in an over head tank. A connection runs under to the underground tank to check the availability of water in the tank before operation the pump and the pump operates only automatic Water level Controller can be used in Hotels, Factories, Homes Apartments, Commercial Complexes, Drainage, etc., Finally, the project has been successfully implemented tested. I am proud to express my delight as the project I embarked upon is successfully finished in such a short span. The project gave us more confidence that we will be able to put in practice, whatever the theoretical knowledge we gained during the course of study till now. It really persuades us to do more and more perhaps in better way in future.

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