

Automatic Hand Sanitizer

<https://www.youtube.com/watch?v=pEnGegvcu34>

In this corona period hand sanitizer is an essential thing. Because it can kill the Covid -19 virus. But use of the normal sanitizer bottle becomes very danger. When an infected person presses the bottle trigger, the virus may spread from this hand sanitizer bottle. We can solve this by using Automatic hand sanitizer bottle. Automatic means, no need to trigger with our hand. Just place your hand near the bottle. The bottle will automatically trigger.

Here, we use an Ultrasonic distance sensor, Servo motor and Arduino board. Here we are using Arduino Uno. When we place our hand in front of the distance sensor, it will help to the Arduino to measure the distance from the sensor to object (here the hand). If the object in the desired range, Arduino will drive the servo to 180. Servo motor is mounded on the hand sanitizer bottle. And the trigger of bottle is connected to servo by a thread. When servo motor rotates, the trigger will press.

The main objectives of the project are:

- Make an Automatic hand sanitizer.
- HC- SR04 sensor to detect presence of hand.
- Using servo motor for trigger the bottle.
- Using Arduino Uno to achieve this task.

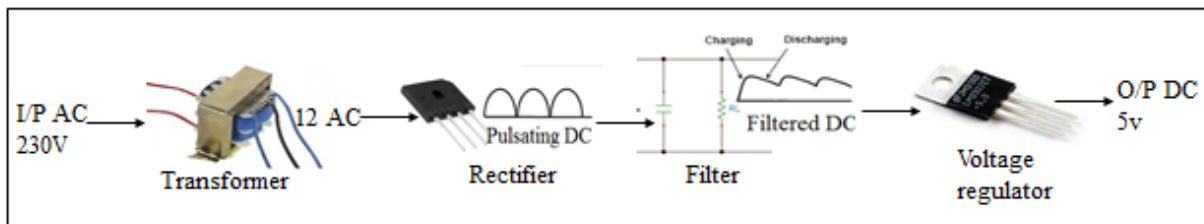
The major building blocks of this project are:

- Arduino UNO
- SC SR04
- SERVO MOTOR.

Software's used:

- Arduino IDE for compiling and dumping code into Microcontroller
- Express SCH for Circuit design.

Regulated Power Supply:



Block Diagram:

Automatic Hand Sanitizer

