

## Description:

ADIY LM393 amplifier module can be used to compare an input voltage with a predetermined voltage level. ADIY LM393 IC contains 2 op-amps that are completely independent. In LM393 comparator module, only one of the op-amps is used and the other is not connected. The module compares input voltage with the desired voltage level, and produces a digital output. The voltage level can be any value between the module positive and negative supply voltages. This voltage level can be adjusted using the potentiometer on the module.

## Specifications and Features:

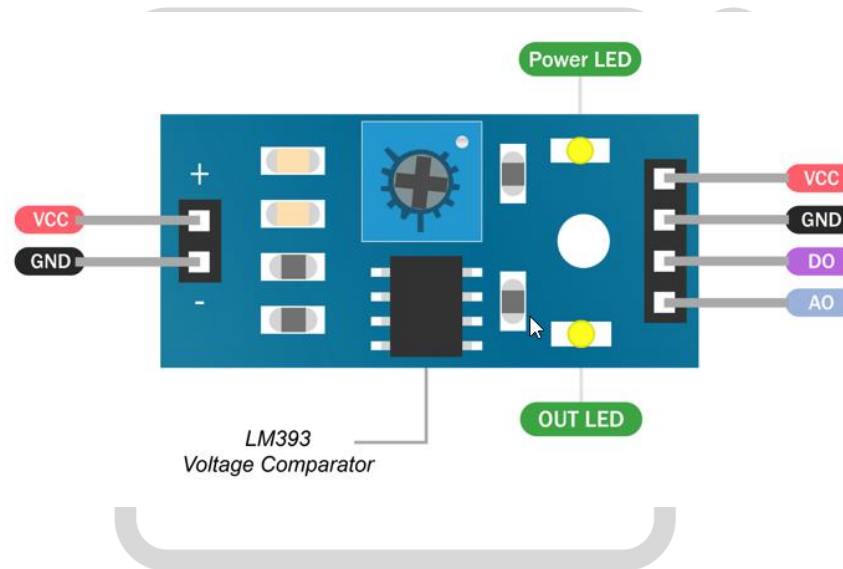
1. Input voltage :- 3.3 to 5V
2. Adjustable threshold (via potentiometer)
3. Analog and Digital Out
4. Power and Signal indicator LED's
5. Mounting hole

## How it works:

Each of the comparators in the LM339 have two inputs marked '+' and '-'. The device simply compares the difference in voltage between these two input pins and sets the digital output accordingly.

- If the '+' input voltage is higher than the '-' voltage, the output goes HIGH.
- If the '-' input voltage is higher than the '+' voltage, the output goes LOW

## Connections:



4 Pins at the Right Side:

- VCC: Module power supply – 5V
- GND: Ground
- DO: Digital Output
- AO: Analog Output

2 Pins at the Left Side:

- IN+: Input positive side
- IN-: Input negative side

### Advantages:

- Soil Moisture Sensor
- LDR Sensor
- Sound Sensor
- Buzzer Module

