

# Documentation for Water Level System with HomeAssistant

Visit github repo:- [https://github.com/hasio144/HA-Waterlevel\\_System.git](https://github.com/hasio144/HA-Waterlevel_System.git)

A water level system is to be designed that shows water level into 4 different levels as 25%, 50%, 75% and 100% with help of float sensors. Can be used for overhead as well as underground waterlevel systems.

Requirements:

- Homeassistant
- Esphome addon
- Microcontroller (ESP8266 nodemcu in this particular case)
- Logic level shifter
- Wled (WS2812B)
- 5v power supply and usb cable
- Float switches

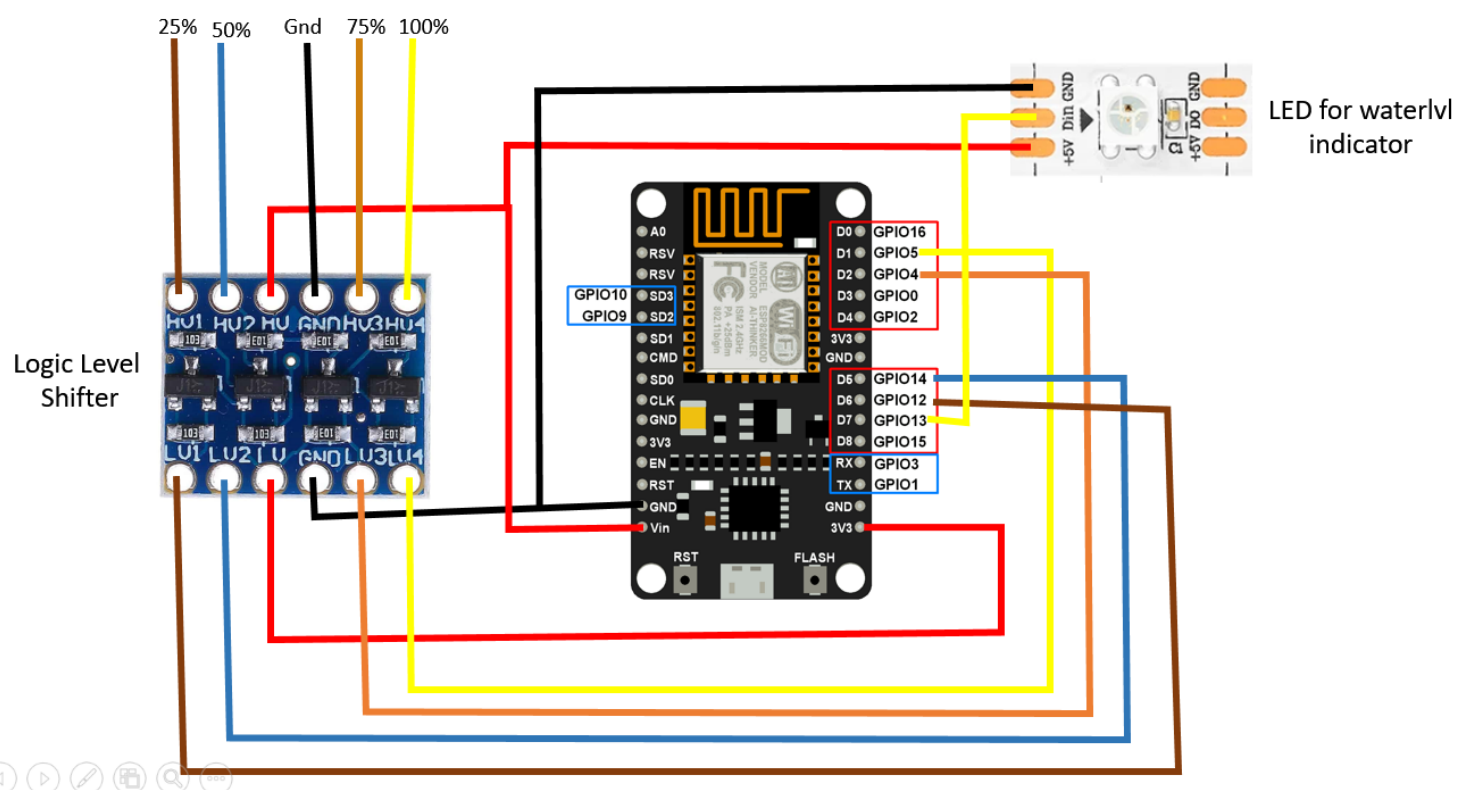


Figure 1: WaterLevel Circuit Wiring

## Esphome Code:

```
binary_sensor:
  - platform: gpio
    name: 25%
    pin:
      number: 12
      mode:
        input: True
        pullup: True
  - platform: gpio
    name: 50%
    pin:
      number: 14
      mode:
        input: True
        pullup: True
  - platform: gpio
    name: 75%
    pin:
      number: 4
      mode:
        input: True
        pullup: True
  - platform: gpio
    name: 100%
    pin:
      number: 5
      mode:
        input: True
        pullup: True
light:
  - platform: neopixelbus
    variant: ws2812x
    pin: 13
    num_leds: 1
    type: GRB
    name: "WaterLvl LED"
    effects:
      - addressable_rainbow:
      - addressable_color_wipe:
      - addressable_scan:
      - addressable_twinkle:
      - addressable_random_twinkle:
      - addressable_fireworks:
      - addressable_flicker:
```

## Templating Code:

\*\*\*\*\*Remember to replace 'binary\_sensor.water\_level\_25%' with the name of your sensor\*\*\*\*\*

```
{% if is_state('binary_sensor.water_level_25%', 'off') and is_state('binary_sensor.water_level_50%', 'off') and is_state('binary_sensor.water_level_75%', 'off') and is_state('binary_sensor.water_level_100%', 'off') -%}
```

Empty

```
{% elif is_state('binary_sensor.water_level_25%', 'on') and is_state('binary_sensor.water_level_50%', 'off') and is_state('binary_sensor.water_level_75%', 'off') and is_state('binary_sensor.water_level_100%', 'off') -%}
```

25% filled

```
{% elif is_state('binary_sensor.water_level_25%', 'on') and is_state('binary_sensor.water_level_50%', 'on') and is_state('binary_sensor.water_level_75%', 'off') and is_state('binary_sensor.water_level_100%', 'off') -%}
```

50% filled

```
{% elif is_state('binary_sensor.water_level_25%', 'on') and is_state('binary_sensor.water_level_50%', 'on') and is_state('binary_sensor.water_level_75%', 'on') and is_state('binary_sensor.water_level_100%', 'off') -%}
```

75% filled

```
{% elif is_state('binary_sensor.water_level_25%', 'on') and is_state('binary_sensor.water_level_50%', 'on') and is_state('binary_sensor.water_level_75%', 'on') and is_state('binary_sensor.water_level_100%', 'on') -%}
```

Full

```
{% elif is_state('binary_sensor.water_level_25%', 'unavailable') or is_state('binary_sensor.water_level_50%', 'unavailable') or is_state('binary_sensor.water_level_75%', 'unavailable') or is_state('binary_sensor.water_level_100%', 'unavailable') -%}
```

Unavailable

```
{% else -%}
```

Error

```
{% endif -%}
```