

# Float Switch

## Water level sensor

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Can be used to sense the level of liquid in a tank, activate a pump if the water is filled. An indicator or alarm to other device. Some applications applied is for hydroponics, salt water tank, freshwater tank, gardening, aquariums, pet bowls, fish tanks, filtration etc. Kindly use a relay to control the contact. Compatible in all gizDuino boards and other MCUs board.

### **Specifications:**

**Wire Length:** 395mm  
**Maximum Switching current:** 0.5A  
**WidthXLength:** 24mm x 66mm  
**Maximum Load:** 50W  
**Maximum Load Current:** 1A  
**Temperature:** -20 ~ +180  
**Maximum Voltage:** 100VDC

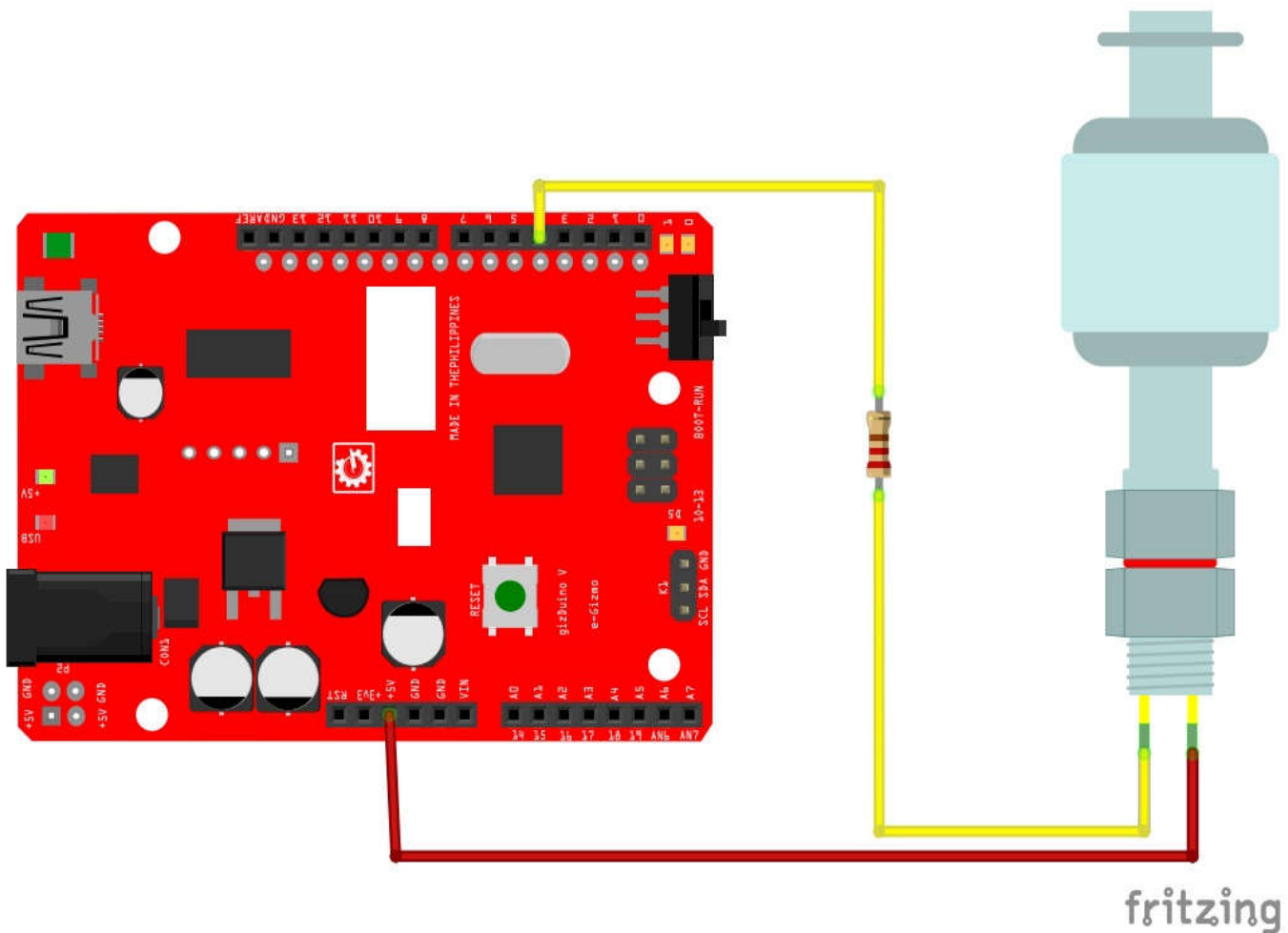
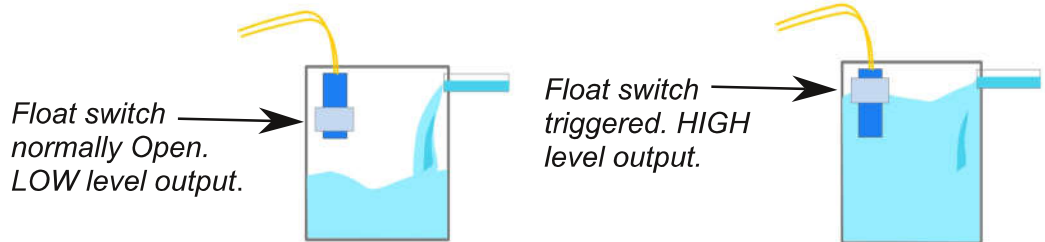
**Wiring Connections:**

**GizduinoV to Float switch**

**D4 --> 220 Ohms Res --> Wire1**

**+5V Wire2**

Place the Float switch on to the container/tank until the water reach the water float switch level.



**Figure 1. Sample Wiring Diagram with Gizduino PLUS to Float switch water level sensor.**

## Sample Codes

```

//*****//
//  Float Switch Water level Sensor  //
//                                  //
//  This is a sample sketch for float //
// switch. The output is Low or 0, if //
// the float switch triggered. Use serial //
// Monitor to show the data.         //
//                                  //
//          Codes by:                 //
//  e-Gizmo Mechatronix Central      //
//  http://www.e-gizmo.net           //
//  Novemver 14, 2017                //
//*****//
// this constant won't change:
const int FloatSwitchPin = 4; // the pin that the pushFloatSwitch is attached to

// Variables will change:
int FloatSwitchState = 0; // current state of the FloatSwitch
int lastFloatSwitchState = 0; // previous state of the FloatSwitch

void setup() {
  // initialize the FloatSwitch pin as a input:
  pinMode(FloatSwitchPin, INPUT);

  // initialize serial communication:
  Serial.begin(9600);
}

void loop() {
  // read the pushFloatSwitch input pin:
  FloatSwitchState = digitalRead(FloatSwitchPin);

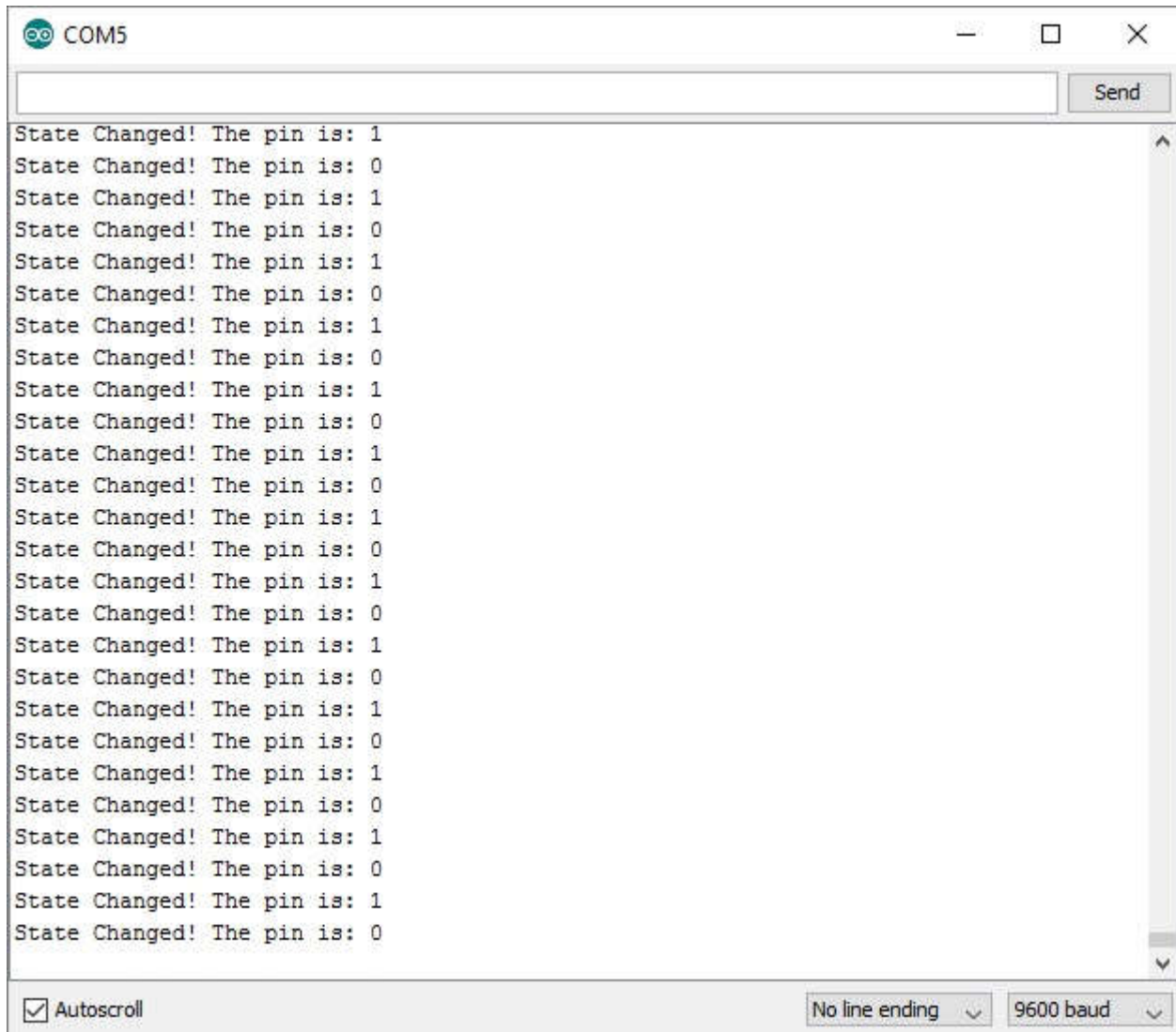
  // compare the FloatSwitchState to its previous state
  if (FloatSwitchState != lastFloatSwitchState) {
    // if the state has changed do the following:

    Serial.print("State Changed! The pin is: "); // Text output to the Serial Monitor
    Serial.println(FloatSwitchState); // Print out the pin's digital state to the Serial
    Monitor

    // save the current state as the last state,
    //for next time through the loop
    lastFloatSwitchState = FloatSwitchState;

}
}

```



**Figure 2. On the Serial monitor you can see the output of the float switch water level sensor.**