



# WATER DETECTOR/SENSOR

ARDUINO | HOW TO USE THE WATER DETECTOR/SENSOR

## OBJECTIVE

Water sensor brick is designed for water detection, which can be widely used in sensing rainfall, water level, and even liquid leakage. When the sensor detects water, the S digital pin responds with a LOW value.

## LAYOUT



## USAGE

Connecting a water sensor to an Arduino is a great way to detect a leak, spill, flood, rain, etc. It can be used to detect the presence, the level, the volume, and/or the absence of water. While this could be used to remind you to water your plants, there is a better Grove sensor for that. The sensor has an array of exposed traces, which read LOW when water is detected.

In our project we utilized the extraordinary capabilities of the water detector/sensor by fashioning a makeshift “vibration” detection device. With the water sensor suspended over a container of water, if any vibrations were made in the room, the ripples in the water would cause the sensor to produce a low signal. From this signal we will be able to deduce movement in an area before there is even a sound to be heard.

## VERSIONS

### WATER LEVEL SENSOR

Some versions of the water detector/sensor allow for analog readings that signify water level rather than just detection. The sensor we are using does not have this functionality, but we believe it is important to note that such a sensor exists.

### WATER PRESSURE SENSOR

Another known version of the water detector/sensor is the water pressure sensor. Which, like its level sensor counterpart, returns an analog signal rather than a digital signal in the form of higher or lower water pressures. Again, this feature does not exist on our sensor, but we thought it would be important to note.

### WATER TEMPERATURE SENSOR

One final version of this sensor is the water temperature sensor. In this case the analog output relays ‘hot’ or ‘cold’ in the form of analog HIGH or LOW.