

ZD1906 IR Adjustable Proximity Sensor

ZD1906 is an IR proximity sensor which can operate over an adjustable range of 3-80cm (depending on object reflectiveness) and has an active low output which can sink up to 100mA. It is fitted with two plastic nuts, and so can be mounted in a panel up to 30mm thick.



The range trimpot can be used to adjust the trigger sensitivity. Clockwise corresponds to greater sensitivity and detection range. The status LED illuminates when the sensor is triggered and the output is active.



The red end is the sensor and has an emitter and receiver behind an IR filter. The field of view is 15 degrees.

Diameter	18mm
Length	45mm
Supply Voltage	5V nominal
Brown Wire	5V input
Blue Wire	Ground connection
Black Wire	Signal

The output is NPN, so it is floating when inactive and pulled to GND when active. To use as an input to a logic level device, connect a pullup resistor to the Signal wire, or enable pullups on the microcontroller input pin, eg for Arduino:

```
pinMode(SIGNALPIN, INPUT_PULLUP);
```

To read the pin, use:

```
state=digitalRead(SIGNALPIN);
```

In this case, state will be 0 when active and 1 when inactive.