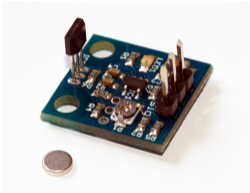


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Hall-E Endstops

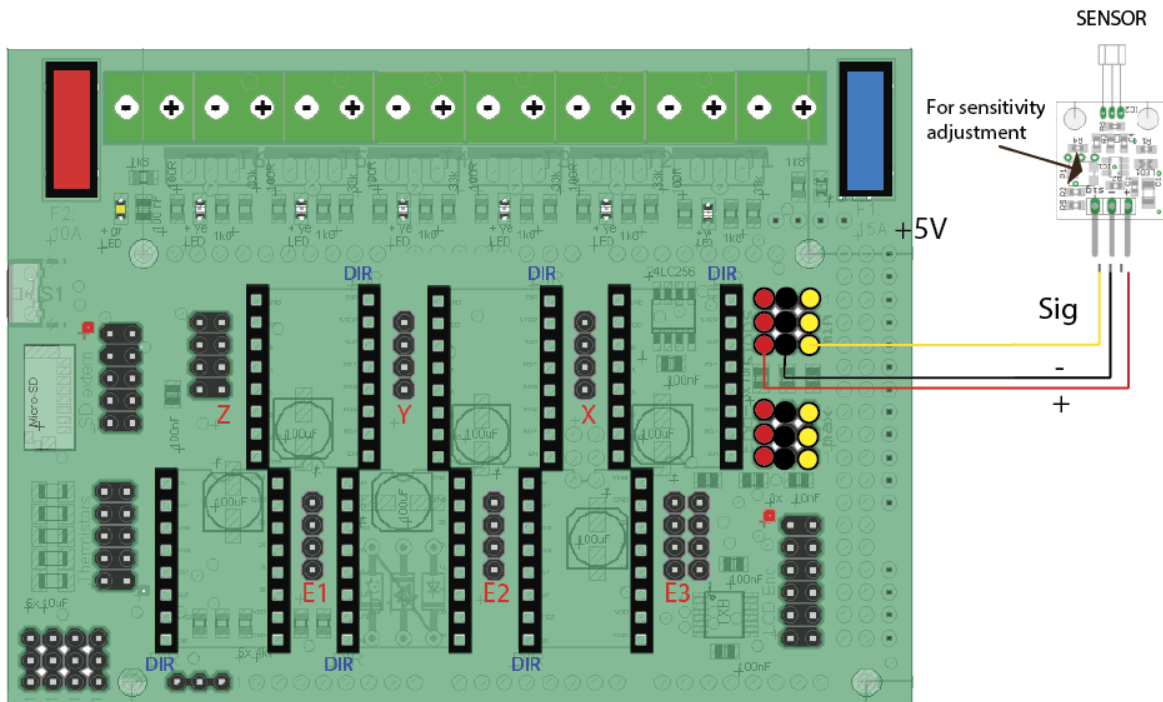
Hall Effect Endstop



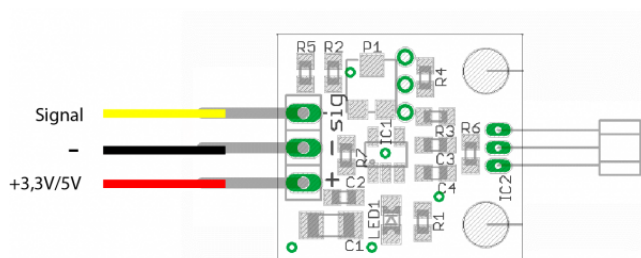
Features

- Hall-effect sensor (magnetic)
- Operating voltage 3,3V or 5V
- Potentiometer for sensitive range setup
- The sensor provides an analog signal that is proportional to the magnetic field strenght that is compared with the preset value set by the potentiometer.
- LED that indicates end stop status
- Includes HALL-E sensor + magnet

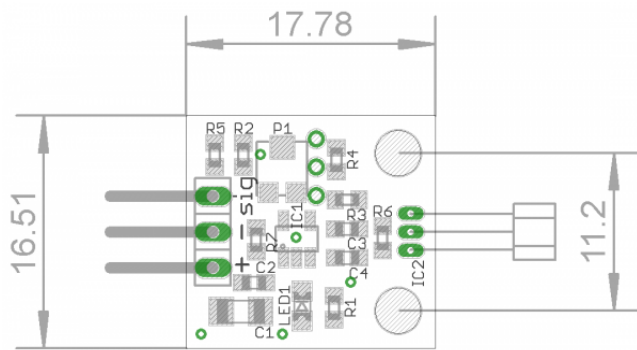
Wiring



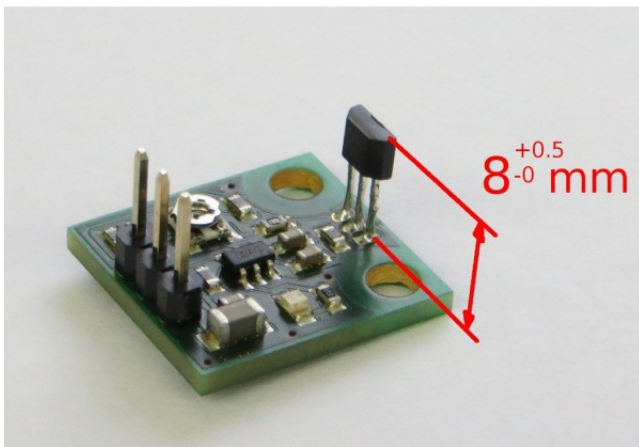
Pin definitions



Dimensions

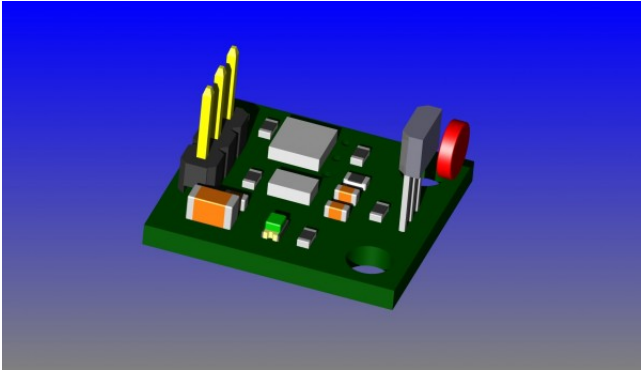


The mounting holes is 3,2mm in diameter



Position of the hall sensor on the circuit board

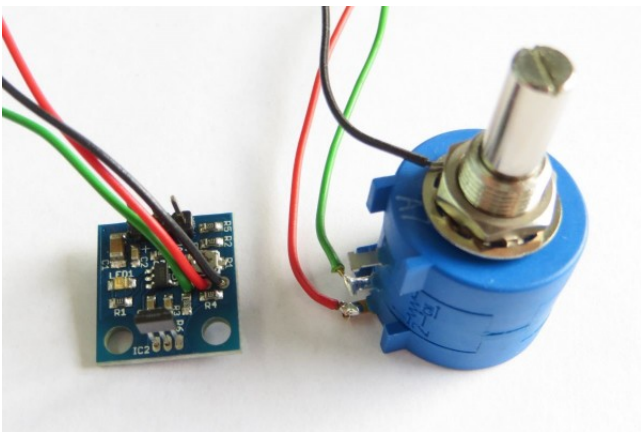
Magnet placement



The magnet has red color in this illustration

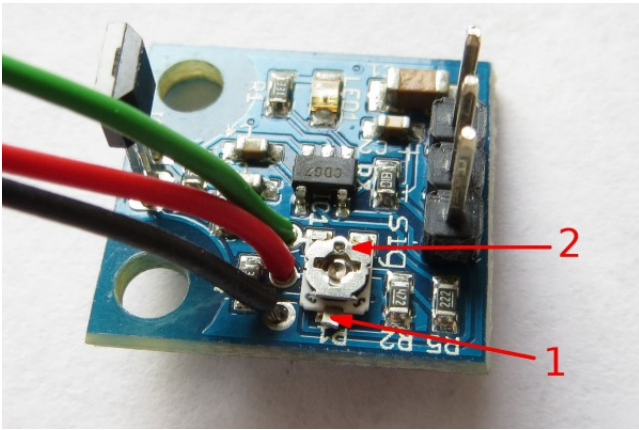
The sensor will detect the magnetic field of the magnet in the front of itself, as shown by picture above. If the sensor does not detect the magnet, try to rotate the magnet upside-down, according the fact that magnets have 2 poles, and only one is detected.

Option for extra-accurate adjustment

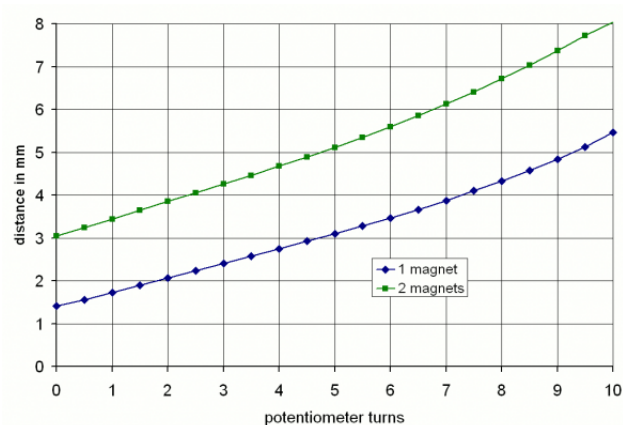


Using a spindle potentiometer (5-10 kOhms), adjustment can be made a lot more sensitive.

Only the wiper and one end of the resistor is connected. The third wire is connected to the potentiometer shield.



You have to disable the internal potentiometer when an external potentiometer is connected. For this purpose, the stop is bent (1) and the wiper rotated to the exactly middle between the two ends of the resistance track (2)..



The spindle potentiometer has 10 turns and 10 kOhms. One turn corresponds to 1 kOhm. The potentiometer on the circuit board has 5 kOhm and a corresponding adjustment from 1.4 to 3.1 mm (one neodymium magnet N45 with $D = 4$ and $H = 1$).

The external potentiometer can be used as a simple and accurate way to fine-tune your Z-end stop.

[More Hall-E images:](#)

