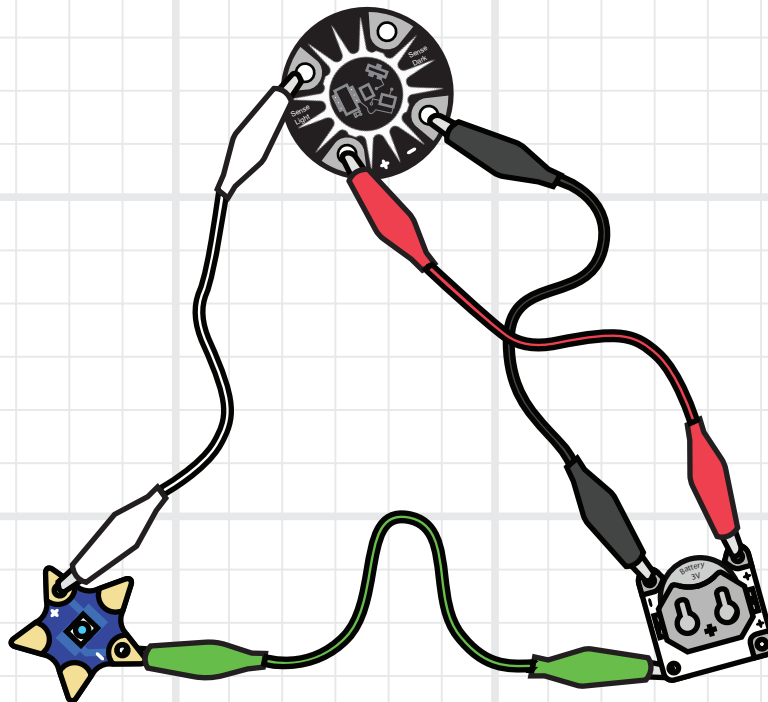


Ambient Light Sensor

How it works

An ambient light sensor detects light, or brightness similar to the way a human eye perceives light levels. They are integrated into many different technologies such as TVs and mobile phone screens to help save battery by adjusting the brightness of the screen based on ambient light levels. The Teknikio Ambient Light Sensor is designed to trigger an output to turn on and off automatically based on light threshold levels that are set in the circuit. This means that it outputs a digital "on" or "off" signal as opposed to other sensors which would output a range of values that would then need to be manipulated through additional hardware or software.

How to connect "sense light"



To connect the sensor in a circuit first connect the sensor to power. Use the Teknikio Battery board and connect to "+" and "-" pads like in the diagram below using alligator clips or another connector. The sensor has two modes: "Sense Light" and "Sense Dark". Let's start with "Sense Light" and a Teknikio Star LEDboard as output. Connect the "Sense Light" pad to the "+" (positive) pad on the LEDboard. Then connect the "-" (negative) pad on the LEDboard to the "-" pad on the Batteryboard. Insert a battery (positive side facing up) into the Batteryboard. Your LED should turn on! Now cover the middle of the sensor board with your finger, thus blocking light from the sensor, the LED should turn off! In this mode, the output will turn on when it senses light and off when it senses darkness.