



## LTR-559 Light & Proximity Sensor Breakout PIM413

This light and proximity sensor detects light over a wide dynamic range (0.01 lux to 64,000 lux) and proximity within a short range of ~5cm.

The LTR-559 is the same sort of sensor that you'd find next to the camera in your phone to detect when it's next to your ear and when your phone should disable the touchscreen.

It's ideal for an automatic *and* manual nightlight switch that detects when ambient light drops below a certain level and automatically triggers something like Unicorn pHAT to come on, or just wave your hand over it to toggle the light on or off manually using proximity sensing.

The LTR-559 Light and Proximity Sensor Breakout has an I2C interface and is 3.3V or 5V compatible. Like our other Pimoroni breakouts, we've designed it so that you can solder a piece of right-angle header onto it and then pop it straight onto the bottom left 5 pins on your Raspberry Pi's GPIO header (pins 1, 3, 5, 6, 9).

It's also compatible with our fancy new Breakout Garden, where using breakouts is as easy just popping it into one of the six slots and starting to grow your project, create, and code.

## Features

- Lite-On LTR-559ALS-01 sensor
- I2C interface (address: 0x23)
- IR/UV-filtering
- 50.60Hz flicker rejection
- 0.01 lux to 64,000 lux light detection range
- ~5cm proximity detection range
- 3.3V or 5V compatible
- Reverse polarity protection
- Raspberry Pi-compatible pinout (pins 1, 3, 5, 7, 9)
- Compatible with Raspberry Pi 3B+, 3, 2, B+, A+, Zero, and Zero W
- Python library
- Datasheet

## Kit includes

- LTR-559 Light and Proximity Sensor Breakout
- 1x5 male header
- 1x5 female right angle header

## Software

We've put together a Python library that you can use to read data from your LTR-559 Light and Proximity Sensor Breakout, and an easy one-line installer to install everything.

**Our software does not support Raspbian Wheezy.**

## Notes

Dimensions: 19x19x3mm

