ROBOSAPIEN

PRINCIPLE

PHOTODIODE

A **photodiode** is a semiconductor device that converts light into an electrical current. The current is generated when photons are absorbed in the photodiode.

IR SENSOR

An **infrared sensor** is an electronic device, that emits in order to sense some aspects of the surroundings. An IR sensor can measure the heat of an object as well as detects the motion. These types of sensors measures only infrared radiation, rather than emitting it that is called as a passive IR sensor. The emitter is simply an IR LED (Light Emitting Diode) and the detector is simply an IR photodiode which is sensitive to IR light of the same wavelength as that emitted by the IR LED. When IR light falls on the photodiode, the resistances and these output voltages, change in proportion to the magnitude of the IR light received.