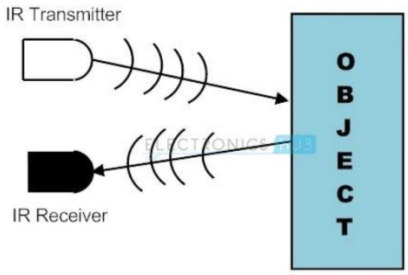
IR sensors

Infrared technology is used in everyday life as well as in industry for a variety of purposes. TVs, for example, use an infrared sensor to decode the signals transmitted by remote control. The main advantages of IR sensors are their low power consumption, simple design, and useful features. IR signals are undetectable to the human eye. In the electromagnetic spectrum, IR radiation can be found in the visible and microwave regions. The wavelengths of these waves typically range from 0.7µm to 5 to 1000 µm. Near-infrared, mid-infrared, and far-infrared are the three regions of the IR spectrum. The wavelength ranges from 0.75 to 3 µm in the near-infrared region, 3 to 6 µm in the mid-infrared region, and more than 6 µm in the far IR region.



An infrared sensor is a device that detects infrared radiation in its environment and outputs an electric signal. An infrared sensor can detect movement as well as to measure the heat of an object.
The Infrared Sensor can detect infrared radiation, which is invisible to our eyes. An infrared sensor is a photodiode that is sensitive to infrared light. When infrared light hits the photodiode, the resistances and output voltages change in proportion to the magnitude of the IR light.

CODE

```
int IRSensor = 2; // connect ir sensor to arduino pin 2
int LED = 13; // conect Led to arduino pin 13
void setup()
{
pinMode (IRSensor, INPUT); // sensor pin INPUT
pinMode (LED, OUTPUT); // Led pin OUTPUT
}
void loop()
{
int statusSensor = digitalRead (IRSensor);
  if (statusSensor == 1)
  {
    digitalWrite(LED, LOW); // LED LOW
  }

  else
  {
    digitalWrite(LED, HIGH); // LED High
  }

}
```