

REMOTE

Infrared (IR) communication is a widely used and easy to implement wireless technology that has many useful applications. The most prominent examples in day-to-day life are TV/video remote controls, motion sensors, and infrared thermometers.

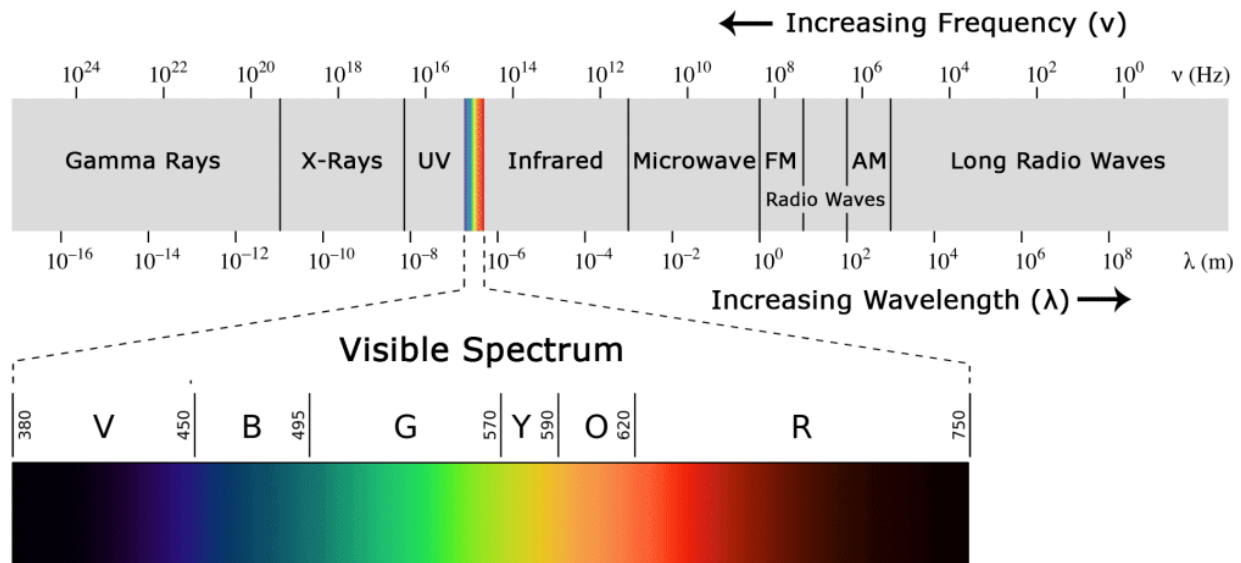
There are plenty of interesting Arduino projects that use IR communication too. With a simple IR transmitter and receiver, you can make remote controlled robots, distance sensors, heart rate monitors, DSLR camera remote controls, TV remote controls, and lots more.

In this tutorial I'll first explain what infrared is and how it works. Then I'll show you how to set up an IR receiver and remote on an Arduino. I'll also show you how to use virtually any IR remote (like the one for your TV) to control things connected to the Arduino.



WHAT IS INFRARED

Infrared radiation is a form of light similar to the light we see all around us. The only difference between IR light and visible light is the frequency and wavelength. Infrared radiation lies outside the range of visible light, so humans can't see it:



Because IR is a type of light, IR communication requires a direct line of sight from the receiver to the transmitter. It can't transmit through walls or other materials like WiFi or Bluetooth.

REFERENCE:

<https://www.circuitbasics.com/arduino-ir-remote-receiver-tutorial/#:~:text=What%20is%20Infrared%3F,anything%20else%20that%20produces%20heat.>