This library enables you to send and receive using infra-red signals on an Arduino.

Tutorials and more information will be made available on [the official homepage](http://z3t0.github.io/Arduino-IRremote/).

**Version - 2.2.3**

**Installation**

1. Navigate to the [Releases](https://github.com/z3t0/Arduino-IRremote/releases) page.
2. Download the latest release.
3. Extract the zip file
4. Move the "IRremote" folder that has been extracted to your libraries directory.
5. Make sure to delete Arduino\_Root/libraries/RobotIRremote. Where Arduino\_Root refers to the install directory of Arduino. The library RobotIRremote has similar definitions to IRremote and causes errors.

**FAQ**

* IR does not work right when I use Neopixels (aka WS2811/WS2812/WS2812B)  
  Whether you use the Adafruit Neopixel lib, or FastLED, interrupts get disabled on many lower end CPUs like the basic arduinos. In turn, this stops the IR interrupt handler from running when it needs to. There are some solutions to this on some processors, [see this page from Marc MERLIN](http://marc.merlins.org/perso/arduino/post_2017-04-03_Arduino-328P-Uno-Teensy3_1-ESP8266-ESP32-IR-and-Neopixels.html)

**Supported Boards**

* Arduino Uno / Mega / Leonardo / Duemilanove / Diecimila / LilyPad / Mini / Fio / Nano etc.
* Teensy 1.0 / 1.0++ / 2.0 / 2++ / 3.0 / 3.1 / Teensy-LC; Credits: @PaulStoffregen (Teensy Team)
* Sanguino
* ATmega8, 48, 88, 168, 328
* ATmega8535, 16, 32, 164, 324, 644, 1284,
* ATmega64, 128
* ATtiny 84 / 85
* ESP32 (receive only)
* ESP8266 is supported in a fork based on an old codebase that isn't as recent, but it works reasonably well given that perfectly timed sub millisecond interrupts are different on that chip. See <https://github.com/markszabo/IRremoteESP8266>
* Sparkfun Pro Micro

We are open to suggestions for adding support to new boards, however we highly recommend you contact your supplier first and ask them to provide support from their side.

**Hardware specifications**

| **Board/CPU** | **Send Pin** | **Timers** |
| --- | --- | --- |
| [ATtiny84](https://github.com/SpenceKonde/ATTinyCore) | **6** | **1** |
| [ATtiny85](https://github.com/SpenceKonde/ATTinyCore) | **1** | **TINY0** |
| [ATmega8](https://github.com/MCUdude/MiniCore) | **9** | **1** |
| Atmega32u4 | 5, 9, **13** | 1, 3, **4** |
| [ATmega48, ATmega88, ATmega168, ATmega328](https://github.com/MCUdude/MiniCore) | **3**, 9 | 1, **2** |
| [ATmega1284](https://github.com/MCUdude/MightyCore) | 13, 14, 6 | 1, **2**, 3 |
| [ATmega164, ATmega324, ATmega644](https://github.com/MCUdude/MightyCore) | 13, **14** | 1, **2** |
| [ATmega8535 ATmega16, ATmega32](https://github.com/MCUdude/MightyCore) | **13** | **1** |
| [ATmega64, ATmega128](https://github.com/MCUdude/MegaCore) | **13** | **1** |
| ATmega1280, ATmega2560 | 5, 6, **9**, 11, 46 | 1, **2**, 3, 4, 5 |
| [ESP32](http://esp32.net/) | N/A (not supported) | **1** |
| [Sparkfun Pro Micro](https://www.sparkfun.com/products/12640) | 9, **5**, 5 | 1, **3**, 4\_HS |
| [Teensy 1.0](https://www.pjrc.com/teensy/) | **17** | **1** |
| [Teensy 2.0](https://www.pjrc.com/teensy/) | 9, **10**, 14 | 1, 3, **4\_HS** |
| [Teensy++ 1.0 / 2.0](https://www.pjrc.com/teensy/) | **1**, 16, 25 | 1, **2**, 3 |
| [Teensy 3.0 / 3.1](https://www.pjrc.com/teensy/) | **5** | **CMT** |
| [Teensy-LC](https://www.pjrc.com/teensy/) | **16** | **TPM1** |

**Experimental patches**