# **Category:Infrared**

#### **Contents**

**Common Protocols** 

IR remote and receiver Kit

Remote Pin Definition
Pin Definition

**Schematic** 

**Datasheet** 

**Arduino Library** 

#### **Common Protocols**

Туре	Standard	singal compose	Use	ICs
NEC, Apple, TiVo and Pioneer Protocols	940nm 38k	* user code1 + user code2 + command code + reversed command code, only need to decode out the user code 1, user code 2 and command code, 1C 2F 33	most common, common IR remote controller, Changhong,	uPD6121, uPD6122, TC9012, and compatible ICs: PT2221, PT2222, SC6121, SC6122, SC9012
Sony	8, 12, 15 and 20 bits. 38 kHz, 40 kHz / TSOP receivers		exclusively by Sony	
Philips RC5, RC5-7F, and RC5-7F-57	13, 14 bits, 36 38 57khz		invented by Phillips but is very common and used by a variety of manufacturers	
Phillips RC6, RC6-6-20, Replay and MCE Protocols	16 20 32 bits		was invented by Phillips but is used by wide variety of manufacturers	
JVC, JVC protocol	Example	Example	is used by equipment made by that manufacturer	
Panasonic_Old, Scientific Atlantic, Cisco, Time Warner, Bright House			is used by some cable boxes and DVR's manufactured by Scientific Atlantic and Cisco	
NECx Protocol		It differs in timing from NEC only by the	similar to the original NEC	

4/2020	Category.irinared - Liectro	Diagon
	length of the header.	protocol. It is used by NEC and a variety of other manufacturers especially Samsung televisions.
Samsung36 protocol	is a somewhat strange 36 bit protocol	used by some Samsung devices especially Blu- ray players.
G.I. Cable protocol		is used by some Motorola cable boxes and DVR's manufactured by General Instruments.
DirecTV protocol	It comes in six different varieties. It uses three different frequencies of 38, 40, or 57 kHz. It also uses two different varieties of lead out times of either 9000 µs or 30,000 µs.	is used by that manufacture's set top boxes.
Phillips rcmm protocol		is sometimes known as the Nokia protocol but is most famous because it is used by set- top boxes for AT&T U-Verse cable systems

Unknown Protocol: Midea, Aimeite, topway

## IR remote and receiver Kit

### **Remote Pin Definition**

Customer Code:00FF



Code map on remote

#### **Pin Definition**

■ VCC: External 3.3V-5V voltage (can be directly connected to 3.3/5v MCU)

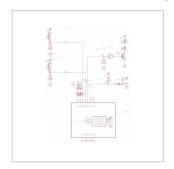
GND: GND External

■ IN: This is the digital output, connect to external MCU IO, IO ports have been designed 10K pull-up resistor

There some pins are available on the base board for further customize.

#### **Schematic**

Schematic has updates



Arduino Infrared shield Schematic R1

### **Datasheet**

- File:IR 1838 datasheet.pdf
- HS0038 Datasheet
- TSOP382 Datasheet

### **Arduino Library**

- IRremote (https://github.com/shirriff/Arduino-IRremote)
- IRLib2 library (http://tech.cyborg5.com/irlib/) or github (https://github.com/cyborg5/IRLib2)

### **Subcategories**

This category has only the following subcategory.

I

IRLED

### Pages in category "Infrared"

The following 5 pages are in this category, out of 5 total.

2

20PCS Infrared Transmmiter LED

Α

Arduino IR Infrared shield

Ε

EDIR

Н

■ HS0038

R

RPI IR

Retrieved from "http://www.electrodragon.com/w/index.php? title=Category:Infrared&oldid=24412"

This page was last edited on 29 January 2020, at 14:38.