Raspberry Pi - IR Receiver 38khz Sensor & Remote Control   User Manual

IR Reveiver

- VCC
- SIGNAL
- GND
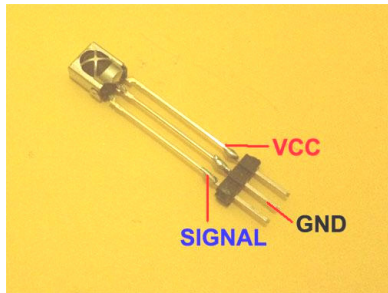
IR Receiver 38khz VS1838B

Signal   S
GND   G
VCC   v+

5V
GND
GPIO18
GPIO23
GPIO24
GPIO25

3V3
GND
GPIO17
GPIO27
GPIO22

1 2
3 4
5 6
7 8
9 10
11 12
13 14
15 16
17 18
19 20
21 22
23 24
25 26

Raspberry Pi V2 P1
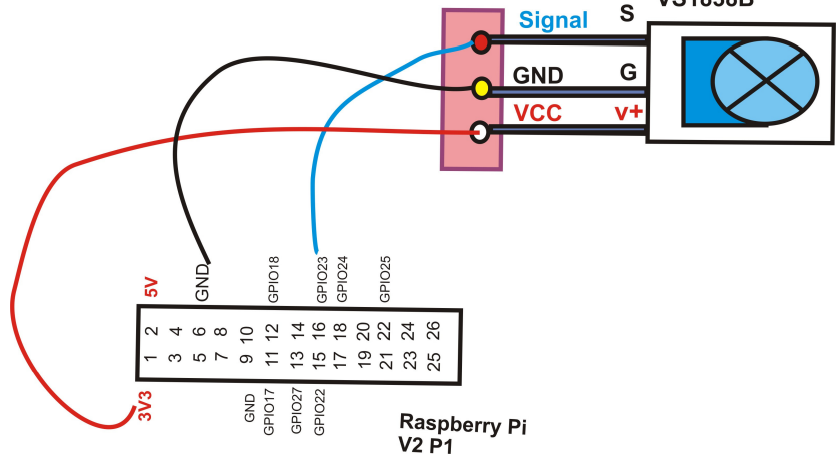
38KHz IR Infrared Remote Control with battery

The new ultra-thin 38K universal infrared remote control, NEC encoding format 1-21-key remote control,
USB port stereo, car MP3, foot bath, lighting, digital photo frame, microcontroller development board, learning board, etc..

features:
Size: 86 x 40 x 6.0mm
The remote control range of 8 - 10 m (infrared receiver quality of the middle whether the obstacles and
other factors will affect the remote control distance)
Battery: 3V lithium manganese battery
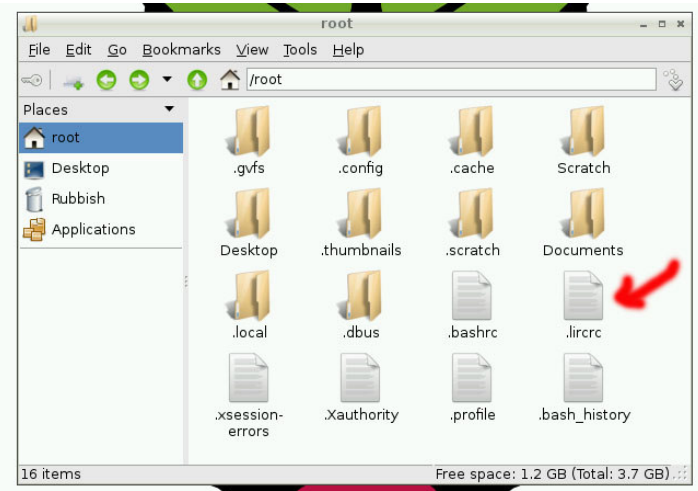IR carrier frequency: 38KHz   Surface materials: 0.125mmPET

1. Sudo apt-get install lirc
2. sudo apt-get install python-lirc

3. Download   3   Remote control setting files

lircd.conf   .lircrc   hardware.conf
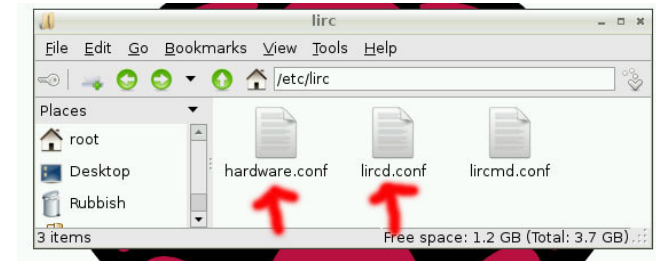
Copy hardware.conf & lircd.conf to /etc/lirc

Copy .lircrc   to /root

192.168.0.16 - PuTTY

```
GNU nano 2.2.6          File: /etc/modules                    Modified

# /etc/modules: kernel modules to load at boot time.
#
# This file contains the names of kernel modules that should be loaded
# at boot time, one per line. Lines beginning with "#" are ignored.
# Parameters can be specified after the module name.

snd-bcm2835
spi-bcm2708
i2c-bcm2708
i2c-dev
lirc_dev
lirc_rpi gpio_in_pin=23




^G Get Help   ^O WriteOut   ^R Read File   ^Y Prev Page   ^K Cut Text   ^C Cur Pos
^X Exit       ^J Justify    ^W Where Is    ^V Next Page   ^U UnCut Text ^T To Spell
```

sudo nano /etc/modules

add   **lirc_dev**
         lirc_rpi gpio_in_pin=23

192.168.0.26 - PuTTY

```
IRR_v2.py  Pi_Scratch_v253      Pi_Scratch_v256.tar   ServoArm
Logger     Pi_Scratch_v253.tar  python_games
root@raspberrypi:/home/pi# sudo python IRR_v2.py
IRR_v2.py:7: RuntimeWarning: This channel is already in use, continuing anyway.
  Use GPIO.setwarnings(False) to disable warnings.
  GPIO.setup(17, 0)
CHAN_DWN
CHAN_SEL
CHAN_UP
PREV
NEXT
PLAY
VOL_DWN
VOL_UP
EQ
BUT_0
BUT_100+
BUT_200+
BUT_1
BUT_2
BUT_3
BUT_4
BUT_5
BUT_6
BUT_7
BUT_8
BUT_9
```

IRR_v2.py   demo

192.168.0.26 - PuTTY

```
permitted by applicable law.
Last login: Tue Feb 25 14:23:24 2014
root@raspberrypi:~# irw
0000000000000001 00 BUT_CHANNEL_DOWN /etc/lirc/lircd.conf
0000000000000002 00 BUT_CHANNEL_SELECT /etc/lirc/lircd.conf
0000000000000003 00 BUT_CHANNEL_UP /etc/lirc/lircd.conf
0000000000000004 00 BUT_PREV /etc/lirc/lircd.conf
0000000000000005 00 BUT_NEXT /etc/lirc/lircd.conf
0000000000000006 00 BUT_PLAY /etc/lirc/lircd.conf
0000000000000007 00 BUT_VOL_DOWN /etc/lirc/lircd.conf
0000000000000008 00 BUT_VOL_UP /etc/lirc/lircd.conf
000000000000000a 00 BUT_0 /etc/lirc/lircd.conf
000000000000000b 00 BUT_100 /etc/lirc/lircd.conf
000000000000000c 00 BUT_200 /etc/lirc/lircd.conf
000000000000000d 00 BUT_1 /etc/lirc/lircd.conf
000000000000000e 00 BUT_2 /etc/lirc/lircd.conf
000000000000000f 00 BUT_3 /etc/lirc/lircd.conf
0000000000000010 00 BUT_4 /etc/lirc/lircd.conf
0000000000000011 00 BUT_5 /etc/lirc/lircd.conf
0000000000000012 00 BUT_6 /etc/lirc/lircd.conf
0000000000000013 00 BUT_7 /etc/lirc/lircd.conf
0000000000000014 00 BUT_8 /etc/lirc/lircd.conf
0000000000000015 00 BUT_9 /etc/lirc/lircd.conf
```

irw   read information from remote control

192.168.0.26 - PuTTY

```
root@raspberrypi:~# irexec
Channel Down pressed
Channel SELECT pressed
Channel UP pressed
PREV pressed
NEXT pressed
PLAY pressed
VOL DOWN pressed
VOL UP pressed
EQ pressed
0 pressed
100+ pressed
200+ pressed
1 pressed
2 pressed
3 pressed
4 pressed
5 pressed
6 pressed
7 pressed
8 pressed
9 pressed
```
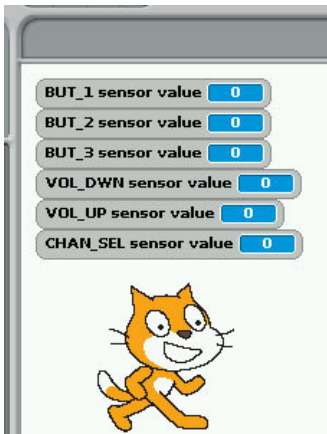
irexec   read information from remote control
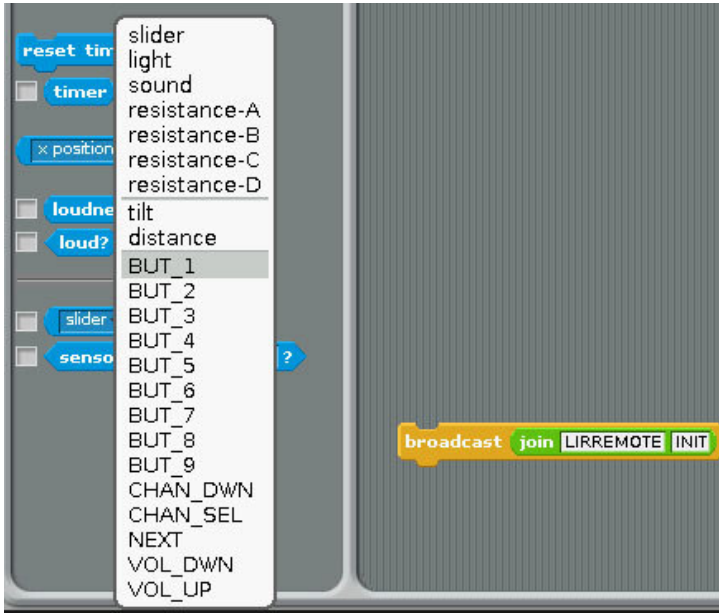
Scratch setting demo

Command " LIRREMOTE" +"INIT" to active IR REMOTE CONTROL

1.broadcast "LIRREMOTEINIT"

2. after broadcast Press the key in remote control you want use in Scratch

in Sensing --> Slider ,   you will see the key you press in the list

Package Content
1x Rs-Pi IR receiver & remote control
3x 20cm male to male cable
1x manual