

## How to install and configure LIRC software

### 1. Install LIRC software

*LIRC (Linux Infrared remote control) is an open source software package for Linux. This software allows your Linux system to receive and send infrared signals.*

```
sudo apt-get install lirc
```

### 2. After installing LIRC, please edit config.txt and add configuration.

The receiver of the B+/2B version expansion board= 26; the infrared transmitter of the infrared control expansion board= 17, the infrared receiver= 18

```
sudo nano /boot/config.txt
```

Add the following line to config.txt

```
dtoverlay=lirc-rpi,gpio_in_pin=18,gpio_out_pin=17
```

### 3. Edit LIRC configuration file to enable infrared function

```
sudo nano /etc/lirc/hardware.conf
```

Modify the following lines

```
LIRCD_ARGS="--uinput --listen"
```

```
DRIVER="default"
```

```
DEVICE="/dev/lirc0"
```

```
MODULES="lirc_rpi"
```

If there is no hardware.conf file or hardware.conf file in lirc, please add the hardware.conf file by yourself:

```
LIRCD_ARGS="--uinput --listen"
```

```
LOAD_MODULES=true
```

```
DRIVER="default"
```

```
DEVICE="/dev/lirc0"
```

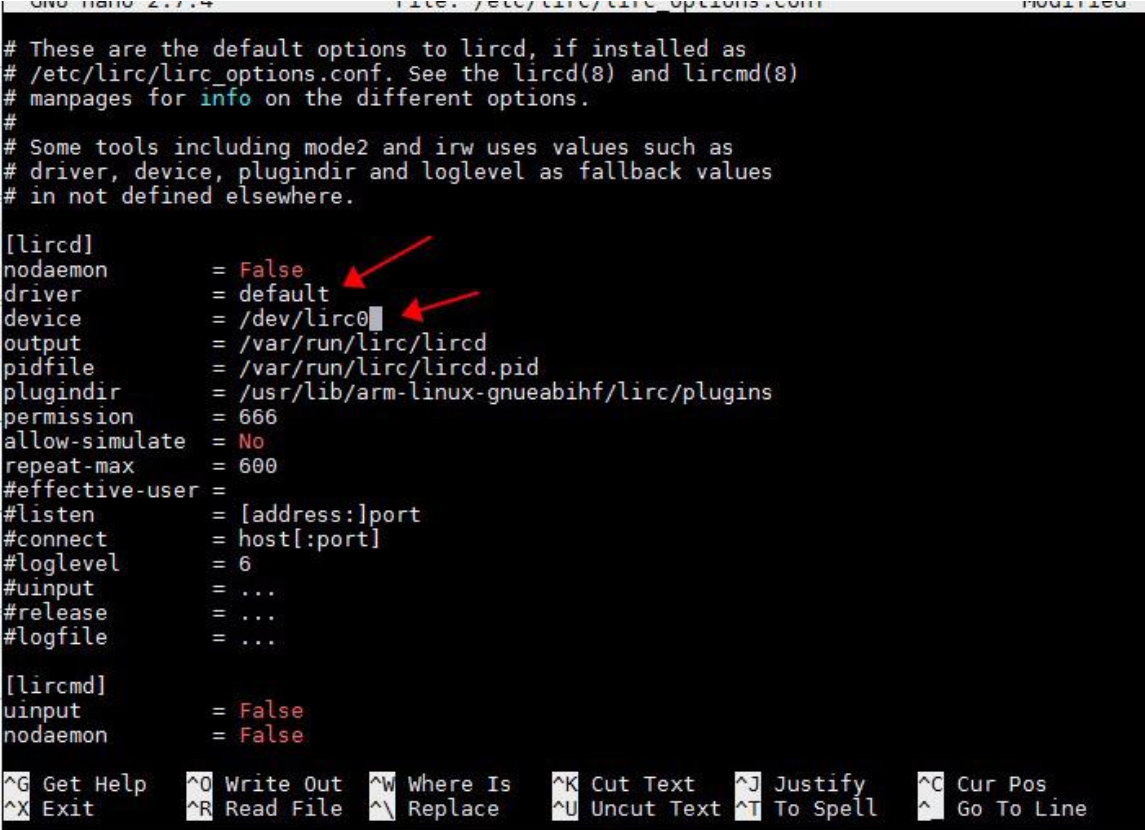
```
MODULES="lirc_rpi"
```

```
GNU nano 2.7.4 File: /etc/lirc/hardware.conf Modified
LIRCD_ARGS="--uinput --listen"
LOAD_MODULES=true
DRIVER="default"
DEVICE="/dev/lirc0"
MODULES="lirc_rpi"
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line
```

Then edit the `/etc/lirc/lirc_options.conf` file, and modify the following two lines:

`driver = default`

`device = /dev/lirc0`



```
# These are the default options to lircd, if installed as
# /etc/lirc/lirc_options.conf. See the lircd(8) and lircmd(8)
# manpages for info on the different options.
#
# Some tools including mode2 and irw uses values such as
# driver, device, plugindir and loglevel as fallback values
# in not defined elsewhere.

[lircd]
nodaemon      = False
driver        = default
device        = /dev/lirc0
output        = /var/run/lirc/lircd
pidfile       = /var/run/lirc/lircd.pid
plugindir     = /usr/lib/arm-linux-gnueabi/hf/lirc/plugins
permission    = 666
allow-simulate = No
repeat-max    = 600
#effective-user =
#listen       = [address:]port
#connect      = host[:port]
#loglevel     = 6
#uinput       = ...
#release      = ...
#logfile      = ...

[lircmd]
uinput        = False
nodaemon      = False
```

#### 4. Re-enable the LIRC function

```
sudo /etc/init.d/lirc stop
```

```
sudo /etc/init.d/lirc start
```

Please note that if you run the above two lines but the system prompts that the command cannot be found, then you may have installed the new version of LIRC, please change to the following command:

```
sudo /etc/init.d/lircd stop
```

```
sudo /etc/init.d/lircd start
```

At this point, the configuration of the LIRC software and expansion board is complete.