

# 1602 Character LCD Plus Keypad User Guide

## Product Introduction:

- This product integrates a LCD1602, RGB LED and five-key button (Up/Down/Left/Right/Select). Due to limited IO ports on Rpi, it also has a built-in IIC interface extension chip used to connect with Rpi. It is easier to use Python to program, just call function libraries.
- LCD1602 has screen output which can display two rows with 16 English letters each row. It is suitable for display some simple text information.
- Five-key button along with LCD1602 provide input interface to make menu selection.
- RGB LED can display seven colors, depending on different input levels.
- This plug-and-play product can be directly plugged into Rpi GPIO without later welding.

## Product Guidance:

First, load the driver

```
sudo nano /etc/modules
```

Add the following information in the open file

```
i2c-bcm2708
```

```
i2c-dev
```

Second, install IIC tool

```
sudo apt-get install i2c-tools
```

Third, restart Rpi

```
sudo reboot
```

Fourth, detect the IIC device

```
sudo i2cdetect -y 1 (for the 2 generation of Rpi )
```

Fifth, install the corresponding Python library file

```
sudo apt-get install python-dev  
sudo apt-get install python-rpi.gpio
```

Sixth, copy *Adafruit\_CharLCDPlate.tar.gz* to */home*

```
cp path/Adafruit_CharLCDPlate.tar.gz /home
```

Seventh, unzip the file

```
tar xvf Adafruit_CharLCDPlate.tar.gz
```

Eighth, run the program

```
cd /home/Adafruit_CharLCDPlate  
sudo python Adafruit_CharLCDPlate.py
```