Grove - Serial Camera Kit User Manual

Release date： 2015/9/22

Version： 1.0

Wiki: http://www.seeedstudio.com/wiki/Grove_-_Serial_Camera_Kit

Bazaar:

http://www.seeedstudio.com/depot/s/Grove%2520-%2520Serial%252

0Camera%2520Kit.html?search_in_description=0

Document Revision History

Revision	Date	Author	Description
1.0	Sep 22, 2015	Loovee	Create file

Contents

Disclaimer

For physical injuries and possessions loss caused by those reasons which are not related to product quality, such as operating without following manual guide, natural disasters or force majeure, we take no responsibility for that.

Under the supervision of Seeed Technology Inc., this manual has been compiled and published which covered the latest product description and specification. The content of this manual is subject to change without notice.

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1. Introduction

Grove - Serial Camera Kit includes one control board and two interchangeable lenses, one is standard lens and the other is wide-angle lens. It's a great camera for Arduino centered image recognition projects, because 30W pixel wouldn't be overwhelming for Arduino, so that real-time image recognition is possible. To make it more fun and playable, lenses of two specs are shipped in this kit. The standard one is for common photo shots and the wide-angle one is specially suitable for monitoring projects.

2. Specifications

- Input Voltage: 5V

- Pixel: 300,000

- Resolution: 640*480, 320*240, 160*120

- Uart Baud Rate: 9600~115200

- Communication: RS485 and RS232

- Photo JPEG compression, high, medium and low grades Optional

- AGC

- Auto Exposure Event Control

- Automatic White Balance Control
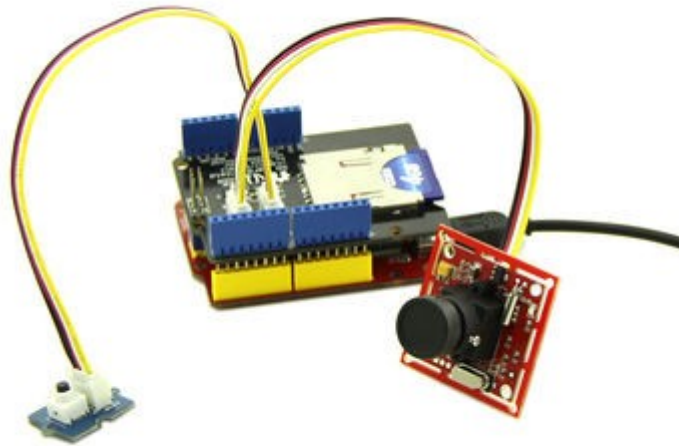
- Focus adjustable

3. Demonstration

This demo will show you how to use Grove - Serial Camera Kit. We need a Seeeduino, an SD Card Shield and a Grove - Button. When the button pressed, we take a photo and save it to SD Card. Follow the below steps step by step, you can easily run your Grove - Serial Camera Kit. Then let's go.

3.1   Hardware Installation

We can find that there are two Grove interfaces on SD Card Shield V4.0, so we needn't a Base Shield, just plug Button to I2C Grove and plug Camera to Uart Grove.

3.2   Download Code and Upload

You can download demo code in github, click here Then upload the code, and it works.

3.3   Take a Photo

After finish uploading demo code, we can take a photo now, just press the button, then wait for a few seconds, a photo will be saved to SD card.

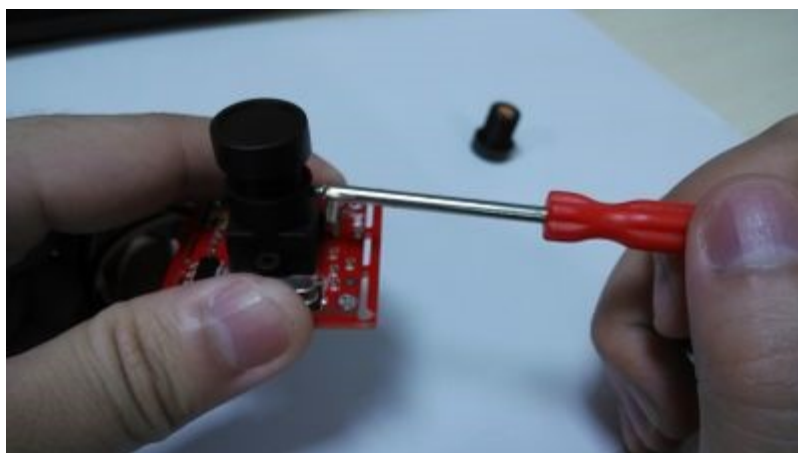The following image is the ceiling of my office use straight angle lens.

3.4   Replacing a Lens

There is another wide-angle lens, I will show you how to replace it.
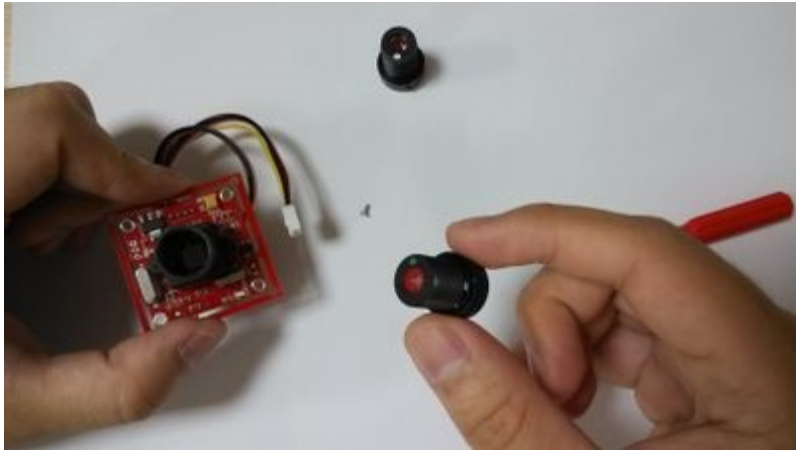
Firstly you should have a screwdriver

Then, unscrew the screws on the side of lens:

Try rotating the lens, it can be screwed out：

We use the wide-angle lens to take a photo, also, it's the ceiling of my office!

Find anything different from the ceiling image previous?

3.5   How To Focus

Lens screwed different depths represent different focal length, you can have a try.

4. Resources

- [Demo Code](#)