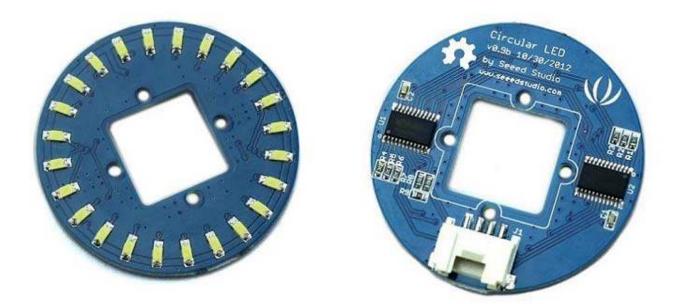
# () seeed

# Grove - Circular LED

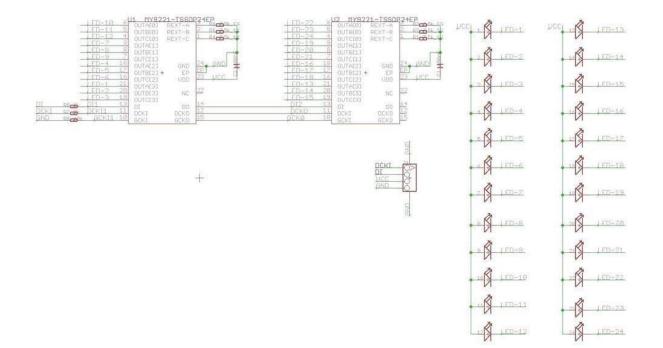


This is a unique ring– it has a florid body with 24 controllable LEDs. Maybe it will drive the inspiration out of you to make a glowing magic ring! There is a 1\*1 square hollowout in the middle of this module, where you can place a Grove Encoder in and make it a rotary visual encoder!

### **Features**

- Circular shape
- 24 LEDs, about 5.5 mA drive current for each channel.
- Controllable LEDs with florid effects
- Grove Interface.

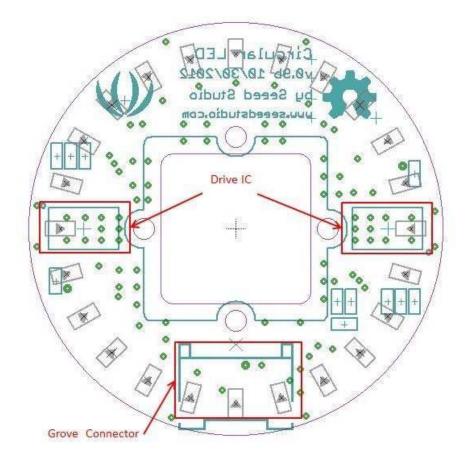
## Schematic



# Specification

ltem	Min	Typical	Max	Unit
Voltage	4.5	5	5.5	VDC
Current	/	5.5 for each LED		mA
Dimension	Ring Form	4.5 diameter		mm
Net Weight	12			g

#### Interface



### Usage

#### Hardware

With the definition "CircularLED circularLED1(10,9);" in the demo, please connect this module to the D9 Grove Connector of Grove base shield with the 4- pin Grove cable. You can also connect the "Yellow" signal to D9 and "White" to D10 with jumper wires.

#### Software

Please download the CircularLED Library and test this module with <u>CircularLEDtest</u> example. You can click here to learn how to upgrade the sketches.



Please also refer to the Grove-Encoder to learn more about this module.

#### **Play with Codecraft**

#### Hardware

Step 1. Connect a Grove - Circular LED to port D5 of a Base Shield.

Step 2. Plug the Base Shield to your Seeeduino/Arduino.

Step 3. Link Seeeduino/Arduino to your PC via an USB cable.

#### Software

**Step 1.** Open Codecraft, add Arduino support, and drag a main procedure to working area.

#### Note

If this is your first time using Codecraft, see also Guide for Codecraft using Arduino.

**Step 2.** Drag blocks as picture below or open the cdc file which can be downloaded at the end of this page.

setup			
·			
Circular LED PIN	D5 👻	show	0 -
Delay ms 40			
Circular LED PIN	D5 👻	show	1-
Delay ms 40		) circu	
Circular LED PIN	D5 👻	show	2 -
Delay ms 40	+	+	+
Circular LED PIN	D5 👻	show	3 🗸
Delay ms 40			
Circular LED PIN	D5 👻	show	4 -
Delay ms 40			
Circular LED PIN	D5 🕶	show	5 🕶
Delay ms 40			
Circular LED PIN	D5 👻	show	6 🗸
Delay ms 40			
Circular LED PIN	D5 👻	show	7 •
Delay ms 40	+	+	+
Circular LED PIN	D5 👻	show	8 🗸
Delay ms 40			
Circular LED PIN	D5 👻	show	9 🗸
Delay ms 40	00 1	511011	
Circular LED PIN	D5 👻	show	10 -
Delay ms 40		) (11011	
Circular LED PIN	D5 🗸	show	11 -
Delay ms 40		Junon	
Circular LED PIN	D5 👻	show	12 -
Delay ms 40	+	+	+
Circular LED PIN	D5 👻	show	13 🗸
	001	511011	
Delay ms 40 Circular LED PIN	D5 👻	show	14 🕶
Delay ms 40	0.0 -	51104	
Circular LED PIN	D5 🕶	show	15 👻
Delay ms 40			
Circular LED PIN	D5 👻	show	16 👻
Delay ms 40		Jonow	
Circular LED PIN	D5 👻	show	17 🕶
Delay ms 40	+	+	+
Circular LED PIN	D5 👻	show	18 👻
Delay ms 40			
Circular LED PIN	D5 🕶	show	19 🕶
Delay ms 40			
Circular LED PIN	D5 👻	show	20 👻
Delay ms 40	· · · · · · · · · · · · · · · · · · ·		
Circular LED PIN	D5 👻	show	21 -
Delay ms 40			
Circular LED PIN	D5 👻	show	22 -
Delay ms 40	+	+	+
Circular LED PIN	D5 👻	show	23 👻
Delay ms 40		- children	
40			

Upload the program to your Arduino/Seeeduino.

#### Success

When the code finishes uploaded, you will see the LED run in the circular.

## Source

- CircularLED Library
- Grove Circular LED schematics PDF File
- Grove-circular LED eagle files
- Codecraft CDC File

## **Tech Support**

Please submit any technical issue into our forum.