### 1.Introduction:

It is a Electronic Lucky Wheel Sweepstakes Electronic Soldering DIY Kit with Red LED.

It can simulate the working state of the lucky wheel very realistically. As the lucky wheel starts, the LED will flash automatically in turns and getting slower and slower until it stops.

The speed of the LED blinking can be adjust. User can mark some lucky reward on withe area to make the game more interesting.

It is a very interesting DIY electronic product which enables users to understand the circuit more clearly and learn welding skills.

### 2.Feature:

- 1>.LED flashes automatically
- 2>.Adjustable Lucky Wheel Duration
- 3>.10 Lucky Choices

#### 3.Parameter:

- 1>.Work Voltage:DC 6V
- 2>.Work Temperature:-20°C~85°C
- 3>.Work Humidity:5%~85%RH
- 4>.Size(Installed):150\*150\*15mm

# 4.Use Steps:

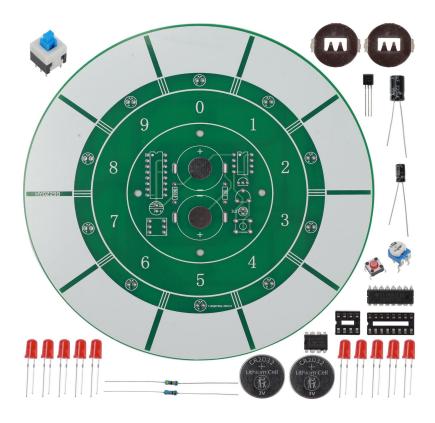
- 1>.Press self-locking switch to turn ON/OFF work power.
- 2>.Adjust potentiometer to set the LED rotation time of each game from 0 to 30s.
- 3>.Press red button to the starts rotate and the LED flashing until one of the LED is selected.

# 5. Component List:

NO.	Component Name	PCB Marker	Parameter	QTY
1	CD4017	U2	DIP-16	1
2	NE555	U1	DIP-8	1
3	IC Socket	U2	DIP-16	1

4	IC Socket	U1	DIP-8	1
5	Metal Film Resistors	R2	10Kohm	1
6	Metal Film Resistors	R3	470Kohm	1
7	5mm Red LED	D1-D10		10
8	Electrolytic capacitor	C1	220uF	1
9	Electrolytic capacitor	C2	1uF	1
10	Self-locking switch	KG		1
11	Switch Button	S1		1
12	Potentiometer	R13	1Mohm	1
13	S9014 Transistor	Q1	TO-92	1
14	CR2032 Battery		3V	2
15	CR2032 Battery Socket			2
16	РСВ		150*150*1.6 mm	1

Note:Users can complete the installation according to the PCB silk screen and component list.



### **6.Installation Tips:**

- 1>.User needs to prepare the welding tool at first.
- 2>.Please be patient until the installation is complete.
- 3>. The package is DIY kit. It need finish install by user.
- 4>. The soldering iron can't touch the components for a long time(3s), otherwise damage components.
  - 5>.Pay attention to the positive and negative of the components.
  - 6>. Strictly prohibit short circuit.
- 7>.User must install the LED according to the specified rules.Otherwise some LED will not light.
  - 8>.Install complex components preferentially.
- 9>.Make sure all components are in right direction and right place.
  - 10>.Check that all of the LED can be illuminated.
- 11>.It is strongly recommended to read the installation manual before starting installation!!!
- 12>.Please wear anti-static gloves or anti-static wristbands when installing electronic components.

## 7.Installation Steps (Please be patient):

- Step 1: Install 1pcs 470Kohm Metal Film Resistor at R3.
- Step 2: Install 1pcs 10Kohm Metal Film Resistor at R2.
- Step 3: Install 1pcs DIP-8 IC Socket at U1. There is a gap mark on one end of the IC Socket and there is a gap mark on PCB silk screen where the IC Socket can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC Socket.
- Step 4: Install 1pcs DIP-16 IC Socket at U2. There is a gap mark on one end of the IC Socket and there is a gap mark on PCB silk screen where the IC Socket can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC Socket.
- Step 5: Install 2pcs CR2032 Battery Socket. Pay attention to the installation direction, otherwise the battery cannot be installed.
  - Step 6: Install 1pcs Switch Button at S1.
- Step 7: Install 1pcs TO-92 S9014 Transistor at Q1. Note that the arc of S9014 corresponds to the arc silk screen on the PCB.
  - Step 8: Install 1pcs 1Mohm Potentiometer at R13.

- Step 9: Install 1pcs 1uF Electrolytic Capacitor at C2.Pay attention to distinguish between positive and negative. The Longer pin is positive pole.
  - Step 10: Install 1pcs Self-locking switch at KG.
- Step 11: Install 10pcs 5mm Red LED at D1-D10. Pay attention to distinguish between positive and negative. The Longer pin is positive pole.
- Step 12: Install 1pcs 220uF Electrolytic Capacitor at C1.Pay attention to distinguish between positive and negative. The Longer pin is positive pole.
- Step 13: Install CD4017 and NE555 IC. There is a gap mark on one end of the IC and there is a gap mark on IC Socket where the IC can place on. These two marks are corresponding to each other and are used to specify the installation direction of the IC.
- Step 14: Write same marks on white area and then to play the Lucky Wheel.

## 8.Install shown steps:

