Lesson 5 - How to use

1.Overview

This product is a DIY Christmas tree and needs to be soldered by hand. The welded Christmas tree has two flashing modes: self-flashing and synchronous programming flashing. It can be compatible with many mainstream Maker education platforms, such as arduino, raspberry, etc. You can purchase multiple Christmas tree sets at the same time, because they can be cascaded indefinitely. Not only can you learn from this suite and have fun, but you can also use them as a home decor.

2.Specifications

(1) Typical working voltage: 5V

(2) Working current: less than 20mA

3.Direction for use

J2\J3 interface: G: negative power supply

V: positive power supply

S: Synchronous signal input or output

POWER switch: power switch

RGB full-color LED (F): The top LED light is a self-flashing full-color LED light, which automatically flashes when powered on and is not controllable.

Progr\Flash mode switch: When dialing to Progr, the flashing mode of the Christmas tree is the programming mode. At this time, there are 10 F5 LEDs on the Christmas tree controlled by the S pin of the J2\J3 interface. You can also control multiple Christmas trees at the same time by cascading. Use UNO R3 to program to control the flashing of the traffic lights, as shown in Figure 1;

When dialing to Flash, it is a single self-flash mode, and the Christmas tree automatically flashes. By adjusting the adjustable resistance, the speed of the white, red and green lights is changed, as shown in Figure 2.

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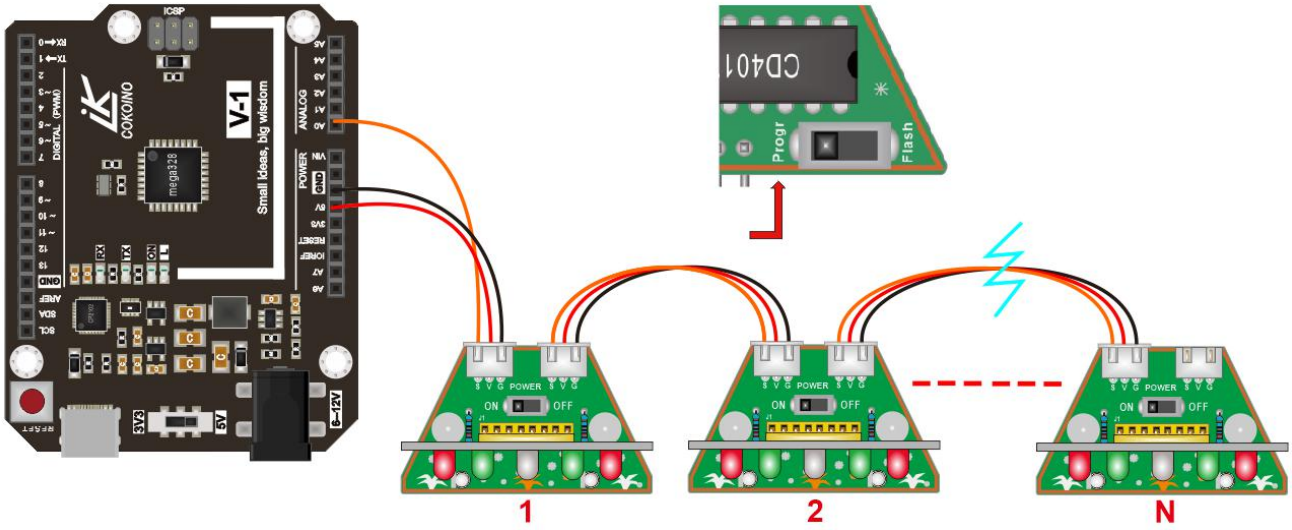
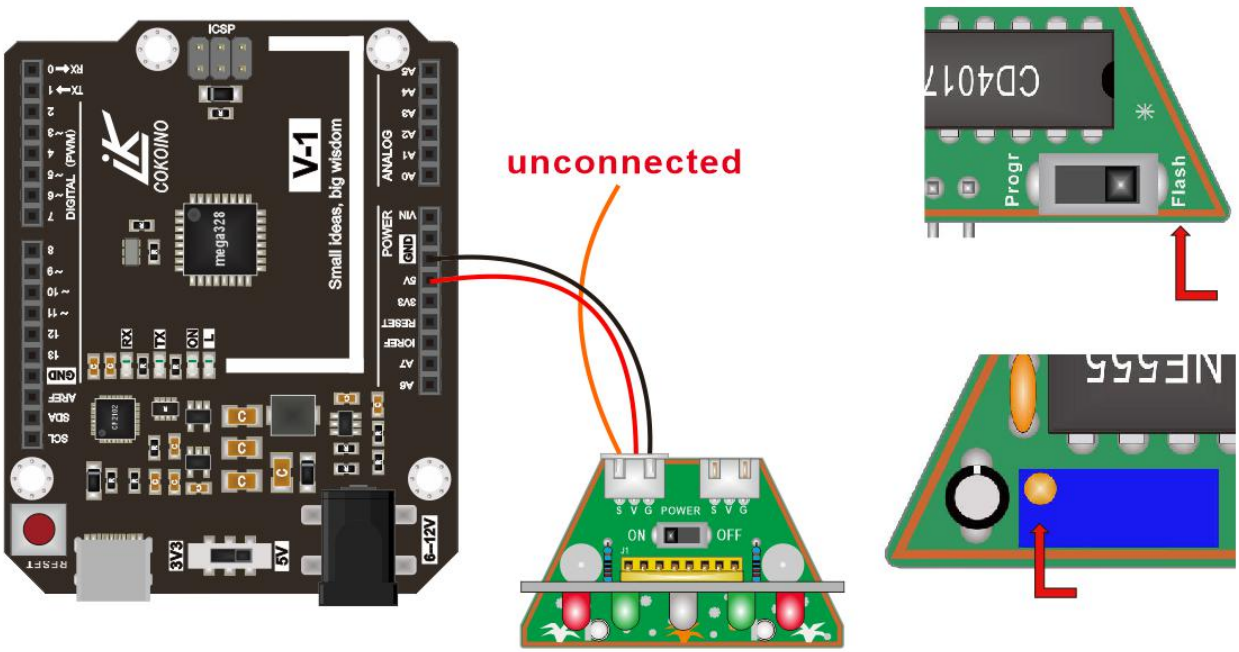


Cascading mode (Figure 1)

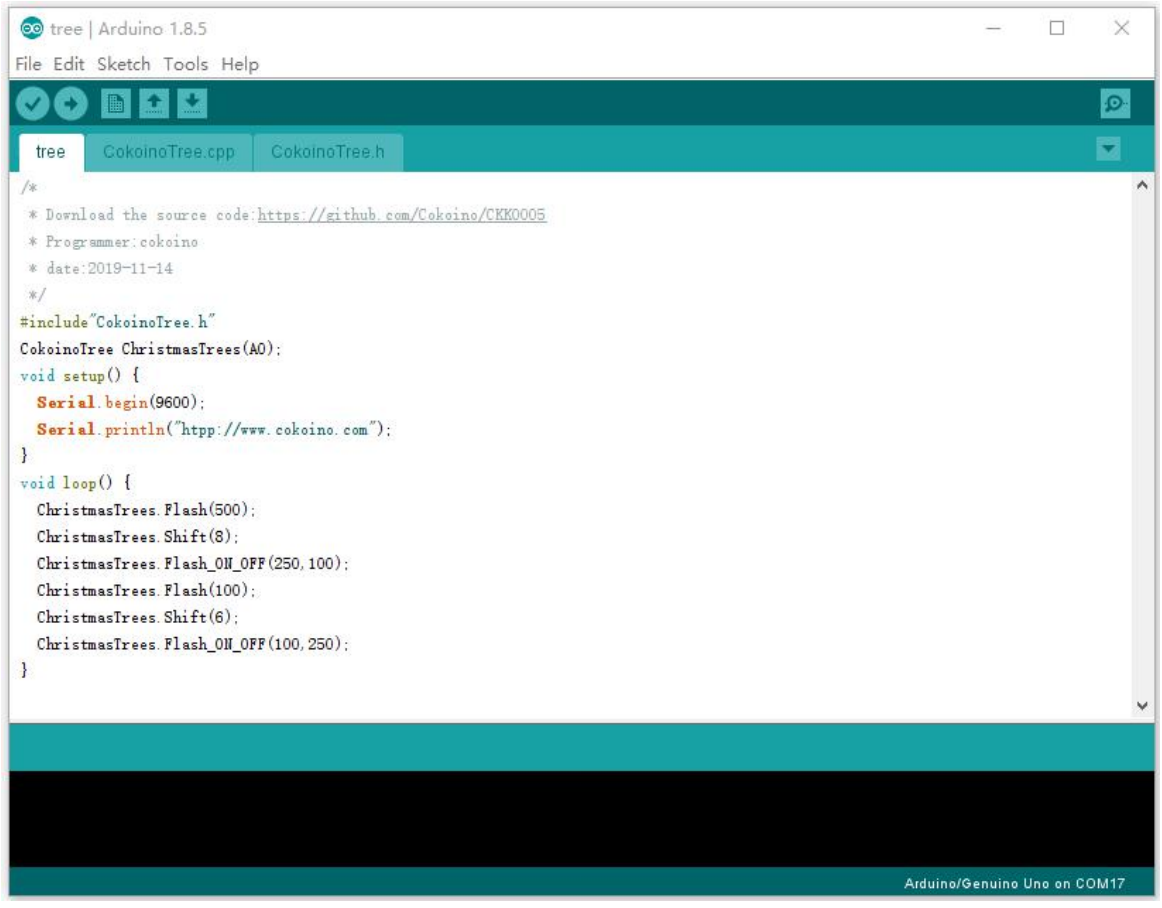


Self-flash mode (Figure 2)

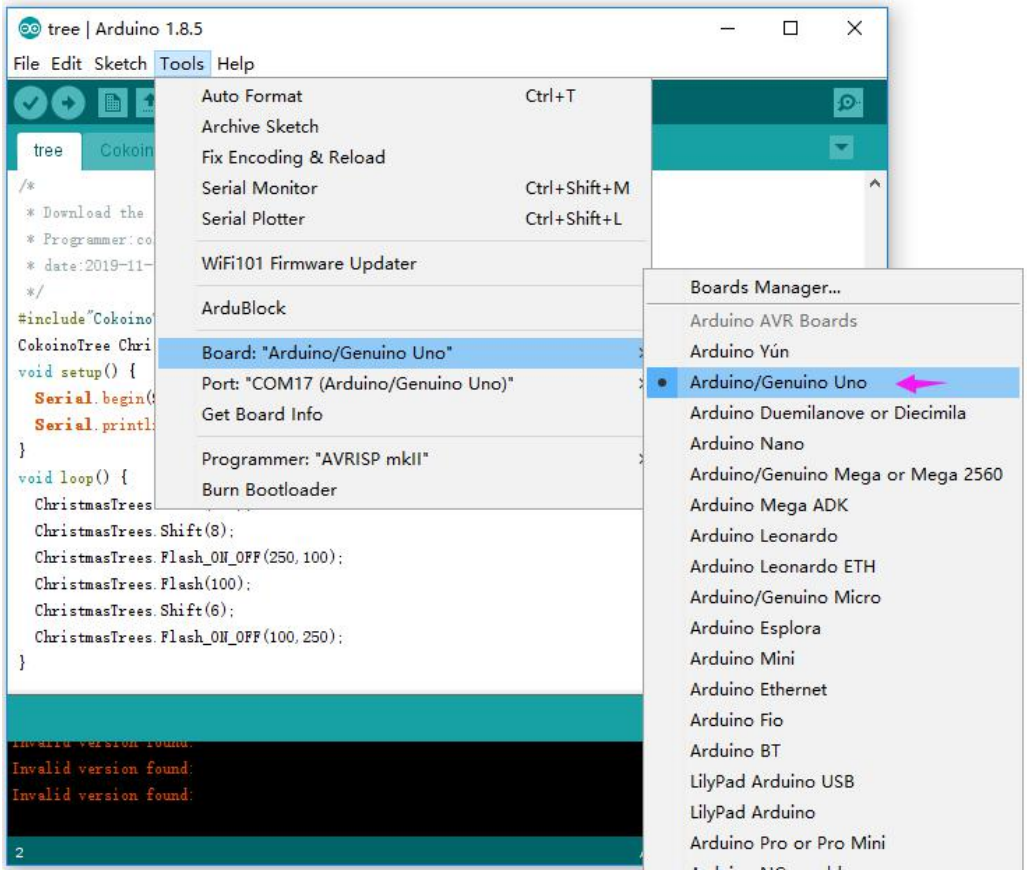
4.Code for single or multiple cascade programming modes (refer to Figure 1 wiring)

Open the provided code with the arduino IDE, as shown below.

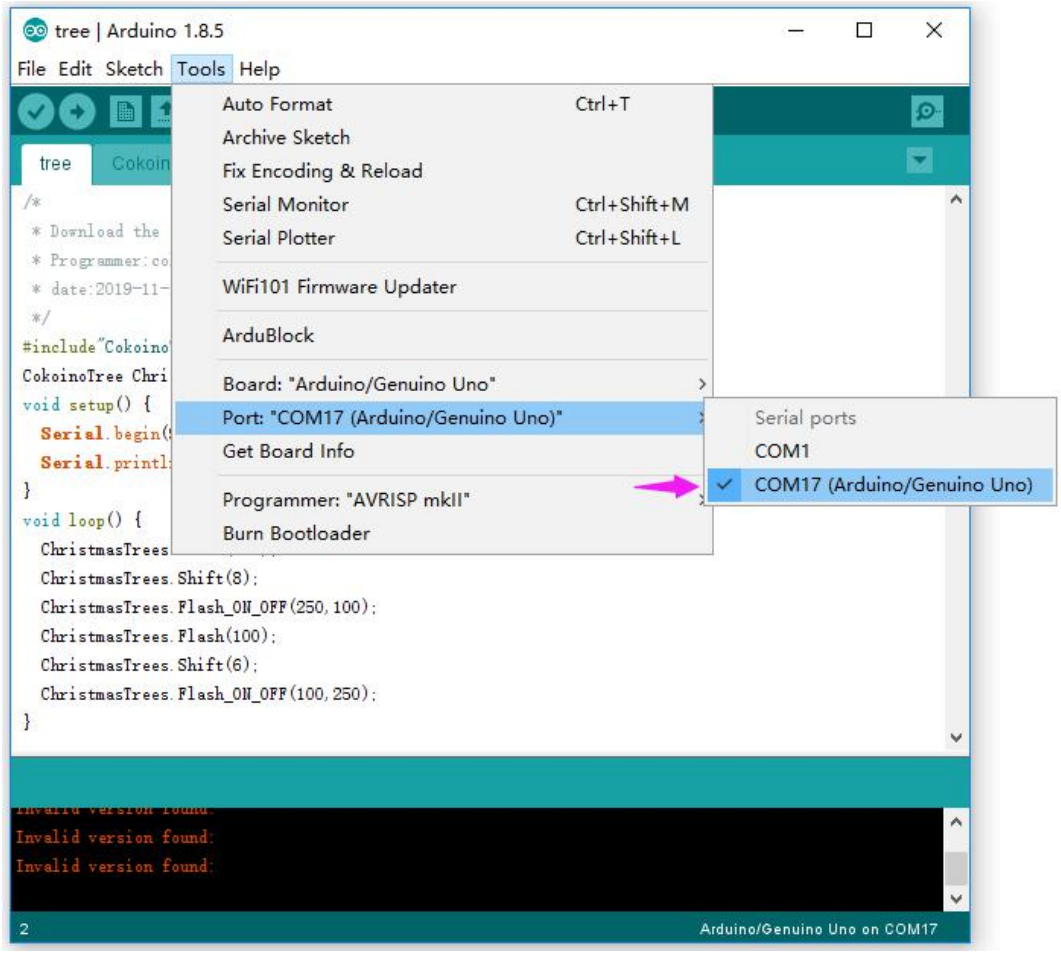
Or download the source code from the following website: https://github.com/Cokoino/CKK0005



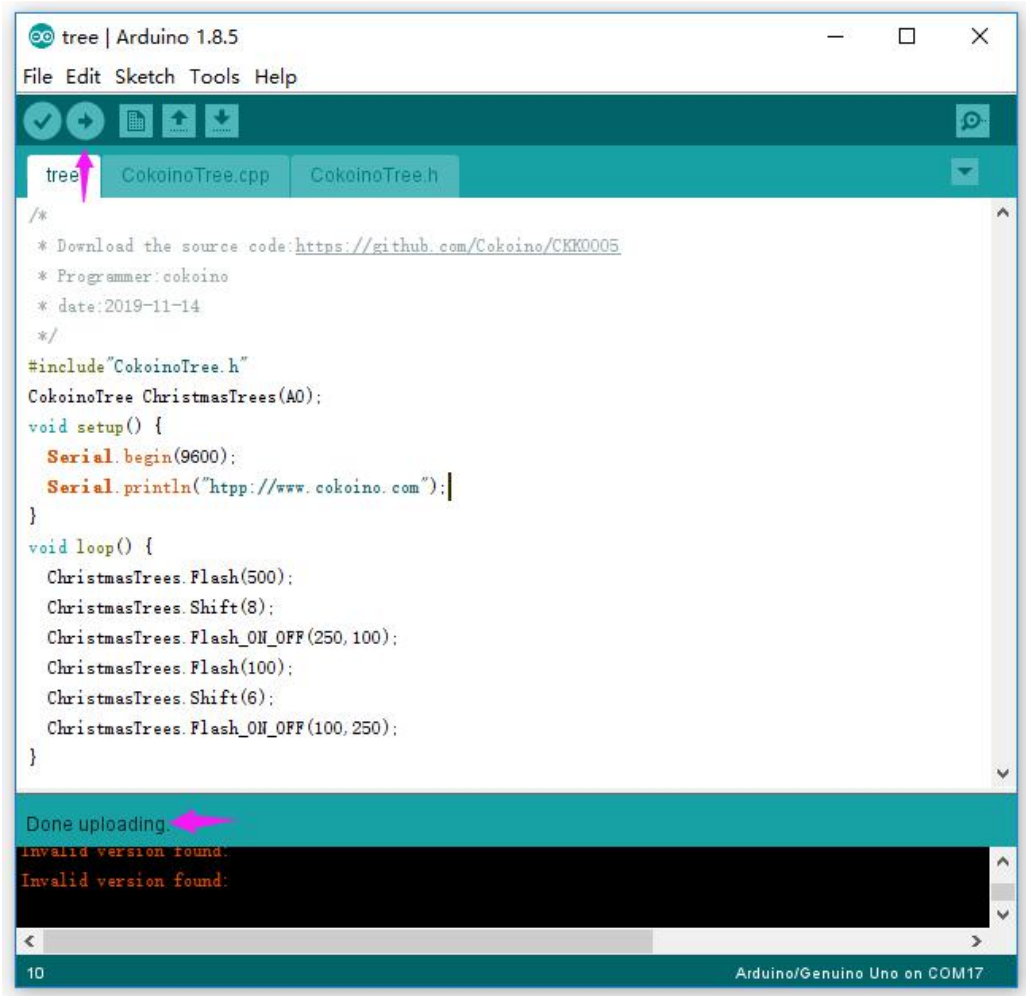
Select the board type



Select the port



Upload the code



Done！

To achieve more features, you can refer to the sample program to write your own program.