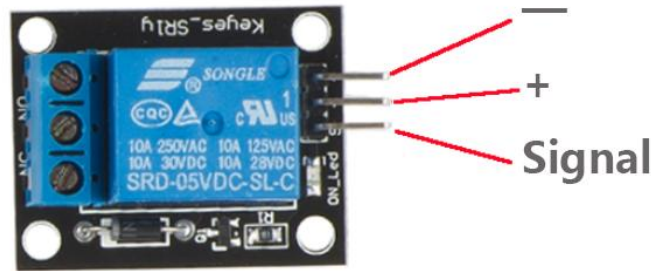# Lesson 28 Relay Module

Introduction

Relays are suitable for driving high power electric equipment, such as lights, electric fans and air conditioning. We can use a relay to realize low voltage to control high voltage by connecting it to MCU.

Components

- 1*SUNFOUNDER UNO board (or SUNFOUNDER MEGA2560 board)
- 1*USB data cable
- 1*Relay module
- Several jumper wires

Experimental Principle

When we make the IO connected to the SUNFOUNDER and the transistor outputs low level (0V) by programming, the transistor will conduct because of current saturation. The normally open contact of the relay will be closed, while the normally closed contact of the relay will be broken; when outputting high level (5V), the transistor will be cut off, and the relay will recover to initial state.

Experimental Procedures

Step 1: Connect the circuit according to the following method

        Relay module   **SUNFOUNDER UNO**

          S ------------------------------- Digital 8

        "-" ------------------------------- GND

         + ------------------------------ 5V

Step 2: Program (Please refer to example code in CD provided by us)

Step 3: Compile the program

Step 4: Burn the program into SUNFOUNDER UNO board

Now, you should be able to hear ticktock. This sound is made by breaking normally closed contact and closing normally open contact.