

Getting Sound Sensor Value from CPX

Step 1: Connect the CPX

- Plug in the CPX board to your computer using a USB cable.
- Make sure the CPX board appears as a drive named **CIRCUITPY** when connected. If not, CircuitPython may need to be installed (refer to previous lesson).
- Open the **Mu Editor**.

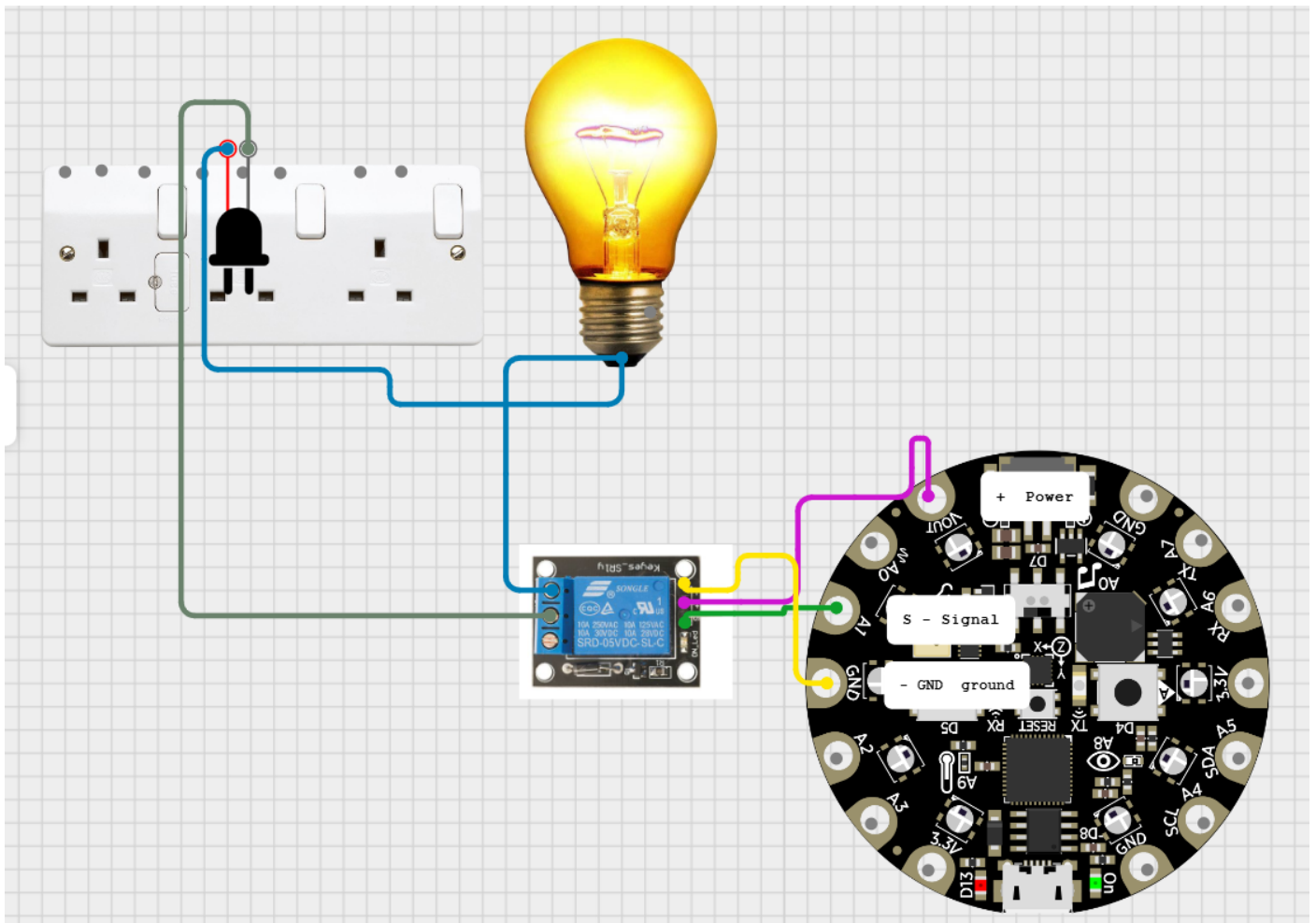
About Relay

5V Relay Terminals and Pins



- **NO (Normally Open):** This terminal is not connected to the common terminal when the relay is not energized. It becomes connected when the relay is activated.
- **NC (Normally Closed):** This terminal is connected to the common terminal when the relay is not energized. It becomes disconnected when the relay is activated.
- **C (Common):** The "C" (Common) terminal is the point that switches between the "NO" and "NC" terminals. When the relay is not energized, the "C" terminal is connected to the "NC" (Normally Closed) terminal, meaning the circuit is closed and current can flow. When the relay is energized, the "C" terminal switches to connect to the "NO" (Normally Open) terminal, opening the circuit and stopping current flow.

Step 2: Circuit setup



- Relay modules usually have three pins: + (VCC), - (GND), and Signal (IN).
- Connect the Signal (IN) pin of the relay to CPX A1
- Connect the - (GND) pin of the relay to CPX GND
- Connect the + (VCC) pin of the relay to CPX 3.3V (or 5V if required by the relay)
- Connect your external light and battery through the relay using the Normally Open (NO) and Common (COM) terminals
- Connect GND of relay to CPX GND
- Connect VCC of relay to 3.3V (or external 5V if needed)
- Connect your external light and battery through the relay (normally open)