The document is provided as an internal and educational instruction.

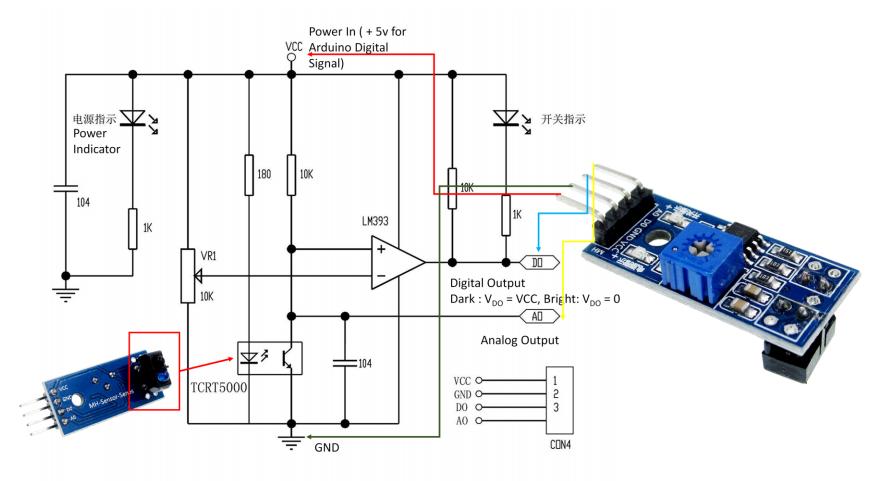


Figure 1. The internal circuit of the optical sensor.

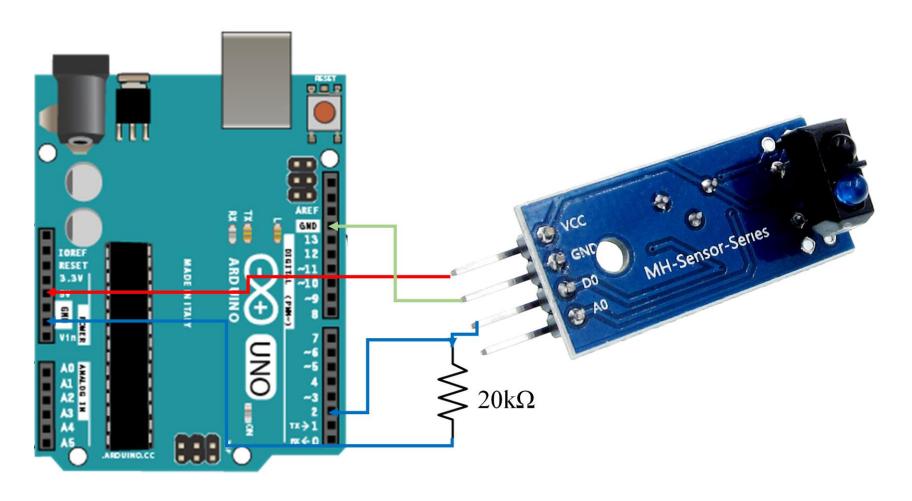


Figure 2. An example of the wiring diagram for the Arduino digital I/O port ( Pin 2 in the picture ) and the optical sensor. Notice the implementation of the pull down resistor.

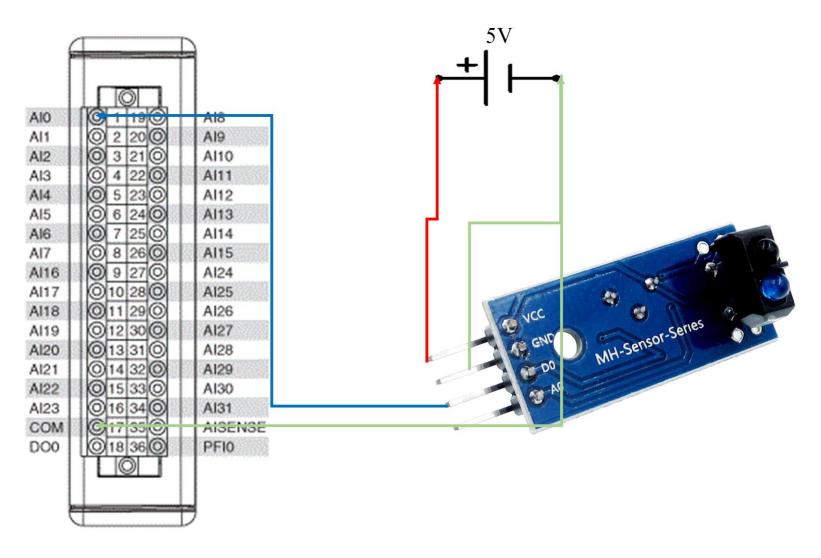


Figure 3. An example of the wiring diagram for the NI Voltage AI DAQ card and the Optical Sensor. The RSE configuration is illustrated in the picture