

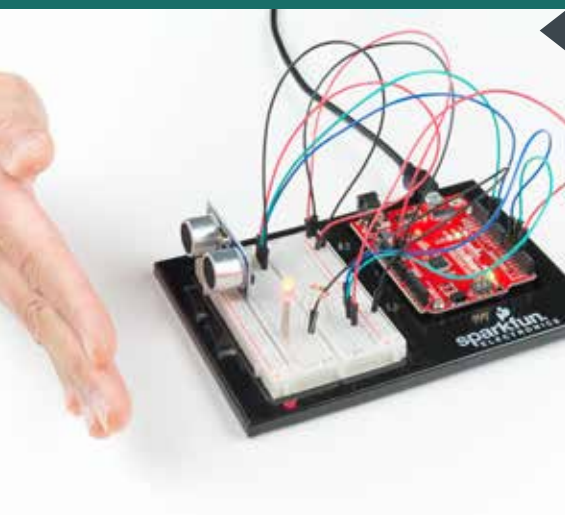
Open the Arduino IDE

Connect the RedBoard to a USB port on your computer.

Open the Sketch:

File > Examples > SIK-Guide-Code-master > **CIRCUIT_3B-DISTANCE SENSOR**

Select **UPLOAD** to program the sketch on the RedBoard.



WHAT YOU SHOULD SEE

Move your hand or a large, flat object closer and farther away from the distance sensor. As the object approaches, the light will change from green to yellow to red. Open the Arduino Serial Monitor to see the distance being read from the sensor.

PROGRAM OVERVIEW

Check what distance the sensor is reading.

- 1: If the distance is less than 10 inches, make the RGB LED red.
- 2: If the distance is between 10 and 20 inches, make the RGB LED yellow.
- 3: If the distance value is not equal to the first two conditions, make the RGB LED green.

TROUBLESHOOTING WARNING: HVAC systems in offices and schools have been known to interfere with the performance of the ultrasonic distance sensor. If you are experiencing sporadic behavior from your circuit, check your surroundings. If there are numerous air ducts in the room you are using, try moving to a different room that does not have ducts. The airflow from these ducts can interfere with the waves sent from the sensor, creating noise and resulting in bad readings.