

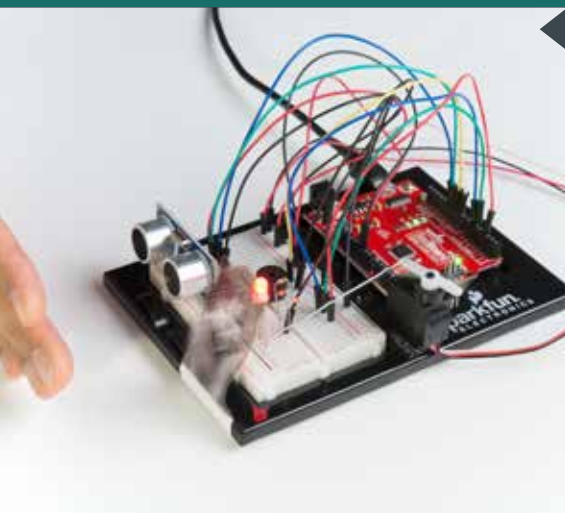
# Open the Arduino IDE

Connect the RedBoard to a USB port on your computer.

## Open the Sketch:

File > Examples > SIK-Guide-Code-master > **SIK\_CIRCUIT\_3C-MOTION ALARM**

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



## WHAT YOU SHOULD SEE

The RGB LED will behave as in your last circuit. It will be green when objects are far, yellow when they are midrange and red when they are close. When an object is close, the buzzer will also beep, and the servo will rotate back and forth. If you decided to attach a pop-up, it will move back and forth.

## PROGRAM OVERVIEW

Check what distance the sensor is reading.

- 1: If the distance is less than 10 inches, make the RGB LED red. Then make the servo rotate back and forth and make the buzzer beep.
- 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.

## CODE TO NOTE

### CONSTANTS:

```
const int trigPin  
= 11;
```

**Constants** are variables that have been marked as “read-only” and cannot have their value changed as the program progresses. Constants are great for declaring pin number variables that will not change throughout the program.