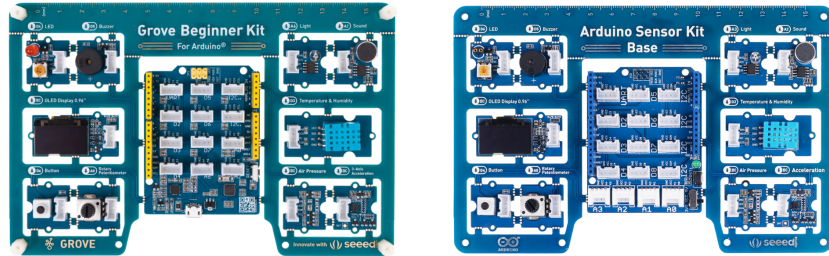


Introduction to the Arduino Sensor Kit & the difference with Grove Beginner Kit



Half a year ago, we released the Grove Beginner Kit for Arduino. It has been sold to more than 70 countries and regions around the world, has been adopted by hundreds of schools and educational institutions, and has served tens of thousands of students and teachers.

We are now proud to announce the upcoming release of the **Arduino Sensor Kit - Base**, a joint production between Seeed and Arduino. This is an official Arduino kit and will be sold on the Arduino.cc website.



The Arduino Sensor Kit is an Arduino UNO shield kit based on the Grove Beginner Kit. It has the exact same module and almost the same usage as the Grove Beginner Kit. It retains the advantages of the Grove Beginner Kit, without soldering, breadboards, or even wiring!

10 Sensors/Modules Included

Both Arduino Sensor Kit and Grove Beginner Kit have the same 10 pre-wired modules.

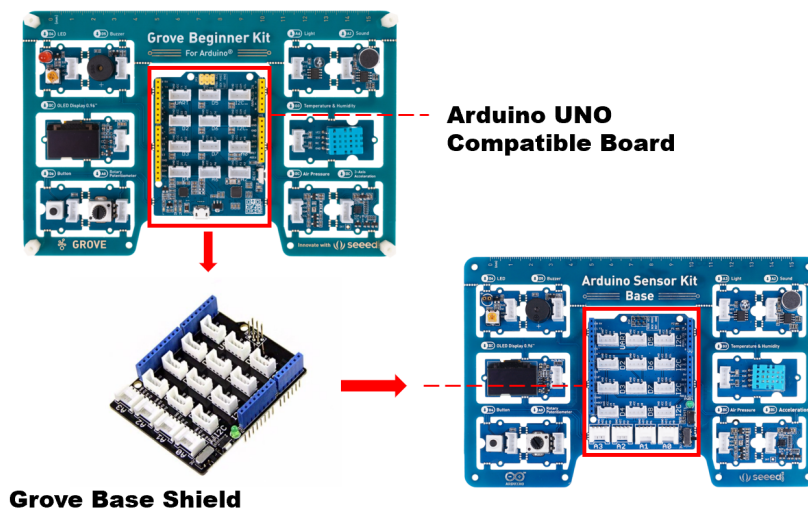
1. **Grove - LED:** Simple LED module
2. **Grove - Buzzer:** Piezo Buzzer
3. **Grove - OLED Display 0.96":** 128×64 dot resolution High brightness, self-emission and high contrast ratio Big screen on a compact design Low power consumption.
4. **Grove - Button:** Momentary Push Button
5. **Grove - Rotary Potentiometer:** Adjustable Potentiometer
6. **Grove - Light:** Detects surrounding light intensity
7. **Grove - Sound:** Detects surrounding sound intensity
8. **Grove - Temperature & Humidity Sensor:** Detects surrounding temperature and humidity values
9. **Grove - Air Pressure Sensor:** Detects surrounding atmospheric pressure
10. **Grove - 3-Axis Accelerator:** Detects object acceleration

So what are the differences between the Arduino Sensor Kit and the Grove Beginner Kit?

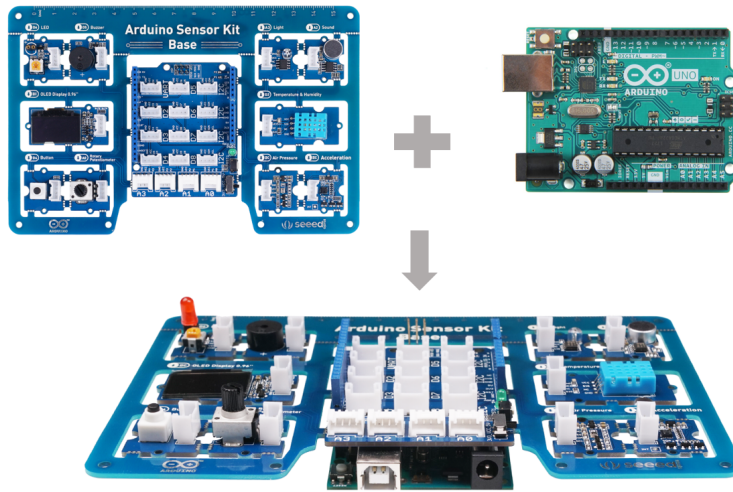
The Major Difference

Well, they look alike, but they are very different: the new Arduino Sensor Kit need to work with Arduino UNO while the Grove Beginner Kit can work alone.

- The Grove Beginner Kit is a kit with Arduino Compatible Control Board(Seeeduino Lotus-compatible with Arduino UNO). So customers do not need to buy an Arduino Board separately.
- The Arduino Sensor Kit replace the Lotus board with [Grove Base shield](#).



So the new Arduino Sensor Kit need to work with an Arduino UNO board or an Arduino compatible board. All you have to do is plug the kit into the Arduino board header, then just coding!

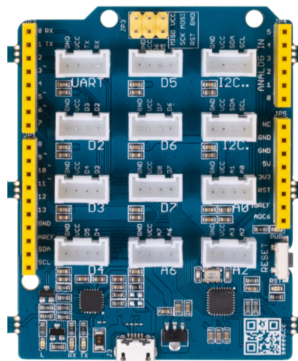


Other Difference

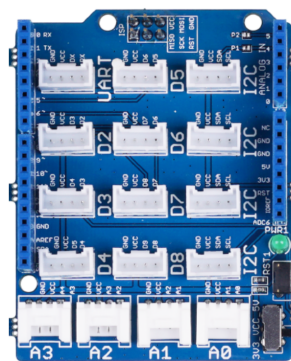
Grove Connector

The Grove Beginner Kit has 12 Grove connectors on the Lotus board while the Arduino Sensor Kit has 16 Grove connectors on the base shield.

Grove Beginner Kit



Arduino Sensor Kit



The Grove connector in the center of the board has a different pin number and layout.

PORT	GROVE BEGINNER KIT	ARDUINO SENSOR KIT
Digital	D2,D3,D4,D5,D6,D7	D2,D3,D4,D5,D6,D7,D8
Analog	A0,A2,A6	A0,A1,A2,A3
I2C	2	4
UART	1	1

LED with PWM

The LED modules in the Grove Beginner Kit connected to the D4 pin of Arduino, which doesn't support PWM function, so users can't use PWM to control the brightness of LED. In the Arduino Sensor Kit, we exchanged the pins of the LED module and the button module. The LED is connected to the