DATA SHEET

STEM SHIELD FOR ARDUINO - KIT
ORDER CODE: KAEDU

Learn how to program a microcontroller with this interactive Arduino® compatible STEM shield kit. It enables you to get immediate feedback of what you have programmed, be it lighting up LEDs, making sounds or playing a memory game. The STEM shield even has sensors so the possibilities are endless.

Accompanied with a suitable edu curriculum - coming soon!

FEATURES

• temperature sensor
• light sensor
• 7-segment display
• 2 stoplight simulations (6 LEDs)
• 4 tactile buttons
• 1 slide switch
• 1 potentiometer
• 1 sounder
• 1 servo connection
• 1 infrared LED
• all element dules are ‘disconnectable’ so the Arduino pins can by used freely
• a ‘line follower’ sensor can by made with the IR LED and light sensor
• the 7-segment and line follower module can be seperated from the main PCB
• fully Arduino compatible

OPTIONS

VELLEMAN NIBBLE - KA0 or VMA0 (microcontroller)

The STEM SHIELD was developed in cooperation with:
Introducing the KAEDU: STEM shield for Arduino!

Use the KAEDU: STEM shield to explore the world of Arduino, sketches, electronics and many more. This is the perfect beginners shield to use when following a STEM education.

- **Buttons and switch!**
  - 4 Tactile buttons and a switch to experiment with

- **Speaker!**
  - Create loopy tunes or a simple synth with the built-in speaker

- **ON/OFF**
  - All modules can be connected and disconnected by means of a shunt

- **Detachable modules!**
  - Line-tracker and 7 segment module are detachable for easy prototyping

- **Line-Tracker!**
  - An infrared emitter and a phototransistor can become a line-tracker module with the right software

- **7 segment display!**
  - Learn how to control a 7 segment display

- **Temperature sensor!**
  - Use the NTC as a temperature sensor

- **Trimmer!**
  - Learn how to read an analog value

- **Servo motor output!**
  - Control a servo motor, just plug and play

- **2 redlight simulators!**
  - Simulate real-life redlight situations

Visit [WWW.VELLEMAN.EU](http://WWW.VELLEMAN.EU) for more information and to purchase the KAEDU: STEM shield.