Gravity: Starter Kit for Genuino / Arduino 101 with Tutorials
SKU:KIT0113

INTRODUCTION

DFRobot's Gravity Genuino (Arduino) 101 Starter Kit is an absolute beginner kit to get started with Arduino/Genuino 101. It comes with 11 projects with easy to follow tutorials. The Gravity interface (Plug&Play) provides the kit a fantastic user experience while keeping the great expandability. It is an excellent kit for STEM and Maker education.

This Starter Kit includes a Genuino 101 (Arduino 101 in USA) board, the latest Arduino compatible board running on a Intel curie processor, featuring functions such as gesture recognition and Bluetooth communication. The kit comes with 13 most popular sensors, modules together with an easy-to-plug IO expansion shield, allowing users to build various interactive projects without using breadboards or jumper wires. Sensors in the kit are highly modularized that can be simply attached to the shield via DFRobot's Gravity interface which is a standard color-coded 3-pin design. Different types of sensors can be easily identified by the logo printed on the back. More than 200 DFRobot sensors and modules are available to power further projects. All components included in the kit are fully compatible with Arduino microcontrollers. With the starter Kit for Genuino 101, building your own project will just be as simple as stacking blocks.

Starter Kit for Genuino/Arduino 101 also provides 11 step-by-step tutorials, which aims to help Arduino beginners to understand Arduino programming. The tutorial goes through the installation of the Arduino IDE, its programming language, how to build electric circuit, how to use different electric components and their signaling. It also includes instruction for building projects from lighting up an LED to eventually use 101 with multiple components to make a real project such as "Weather Station" or "Electronic Gradienter". The tutorial is filled with tons of pictures and diagrams so that anyone can build their own arduino project without any difficulty.

The kit does not require any soldering and is recommended for Arduino class or STEM/Maker education.

Tutorial Includes:

- Arduino Platform and Genuino/Arduino 101
- Analog and Digital Signals
- Simple Automatic Control Devices
- Project 1. Make an LED Blink
- Project 2. Sensor Light
- Project 3. Mini Lamp
- Project 4. Sound Activated LED
- Project 5. Fading LED
- Project 6. Light Regulator
- Project 7. Pandora's Box
- Project 8. Bluetooth Connection
- Project 9. Weather Station
- Project 10. Open Sesame
- Project 11. Electronic Gradienter

APPLICATIONS

- Make A Pseudo Heart Rate Monitor Based On Arduino/Genuino Starter Kit

SPECIFICATION

- Microcontroller: Genuino/Arduino 101
- Power Supply: 6*AA Batteries or 6.5-12V AC power adapter
- Dimension: 220mm * 165mm * 65 mm/ 86.6 * 65 * 25.6 inches
- Weight: 300g

SHIPPING LIST

- Genuino 101 (DFR0436)   x1
- Gravity: IO Expansion Shield for Arduino V7.1 (DFR0265)   x1
- USB BLE-Link (TEL0087)   x1
- USB Cable A-B for Arduino (FIT0056)   x 1
- 9g Metal Gear Micro Servo (1.8Kg) (SER0039)   x 1
- Gravity: Digital Buzzer Module (DFR0032)   x 1
- Gravity: Analog Ambient Light Sensor (DFR0026)   x 1
- Gravity: Analog Sound Sensor (DFR0034)   x 1
- Gravity: Analog Rotation Sensor V1 (DFR0054)   x1
- Gravity: Digital Push Button (Yellow) (DFR0029)   x 1
- Adjustable Infrared Distance Sensor (SEN0019) x 1
- PIR (Motion) Sensor (SEN0171)   x 1
- Gravity:Analog LM35 Linear Temperature Sensor (DFR0023)   x1
- Gravity: Digital Piranha LED Module-Red (DFR0031-R)   x 1
- Gravity: Digital Piranha LED Module - Green (DFR0031-G)   x 1
- Gravity: Digital piranha LED module-Yellow (DFR0031-Y)   x 1
- 6xAA Battery Holder with DC2.1 Power Jack (FIT0141)   x 1
- Gravity Digital Sensor Cable for Arduino   x 7
- Gravity Analog Sensor Cable for Arduino   x 4