

Beginner kit for Arduino

Prezzo: 72.13 €

Tasse: 15.87 €

Prezzo totale (con tasse): 88.00 €



Realizzato con componenti elettronici di qualità, Beginner Kit for Arduino della DFRobot è indicato per coloro che sono interessati a conoscere Arduino e l'elettronica. È composto da una pratica valigetta contenente tutto il necessario per iniziare ad utilizzare Arduino, dalla scheda DFRduino UNO R3 (Arduino Uno compatibile) ai componenti elettronici e al tutorial [Arduino Getting Started](#) contenente 15 progetti. Sarà possibile apprendere le tecniche di programmazione e i principi alla base dell'utilizzo di componenti elettronici come LED, buzzer, motori DC, servomotori RC, ecc. **N.B.** Disponibile solo in lingua Inglese.



La confezione comprende:

- 01 Pz – DFRduino UNO R3 (Arduino Uno compatibile)
- 01 Pz – Shield per prototipazione
- 30 Pz – Jumper Maschio/Maschio
- 10 Pz – Jumper Femmina/Maschio
- 20 Pz – Resistenza 220 ohm $\frac{1}{4}$ w
- 20 Pz – Resistenza 4,7 kohm $\frac{1}{4}$ w
- 20 Pz – Resistenza 10 kohm $\frac{1}{4}$ w
- 20 Pz – Resistenza 1 kohm $\frac{1}{4}$ w
- 09 Pz – LED 5 mm (rossi, verdi, gialli)
- 01 Pz – LED RGB
- 01 Pz – Diodo ricevitore IR
- 04 Pz – Mini pulsante da C.S.
- 01 Pz – Sensore di luce ambientale
- 02 Pz – Tilt sensor
- 01 Pz – Display a 8 segmenti
- 01 Pz – Sensore di temperatura LM35DZ
- 01 Pz – Relè 5 volt da C.S.
- 01 Pz – Buzzer
- 01 Pz – Ventola (solo pale)
- 01 Pz – Motore DC
- 03 Pz – Trimmer 10 kohm
- 01 Pz – Micro Servo 9 grammi
- 01 Pz – Radiocomando IR (con batteria CR2025)
- 01 Pz – Portabatteria per 6 AA
- 01 Pz – Breadboard 400 contatti
- 01 Pz – Cavetto USB
- 15 Pz – Cartoncini per i progetti con schema di collegamento e lista componenti

Struttura del corso

Nel tutorial [Arduino Getting Started](#) sono disponibili 15 progetti e una guida passo-passo (dai concetti semplici ai concetti più difficili). Vengono forniti contenuti didattici sia per i sistemi software che hardware.



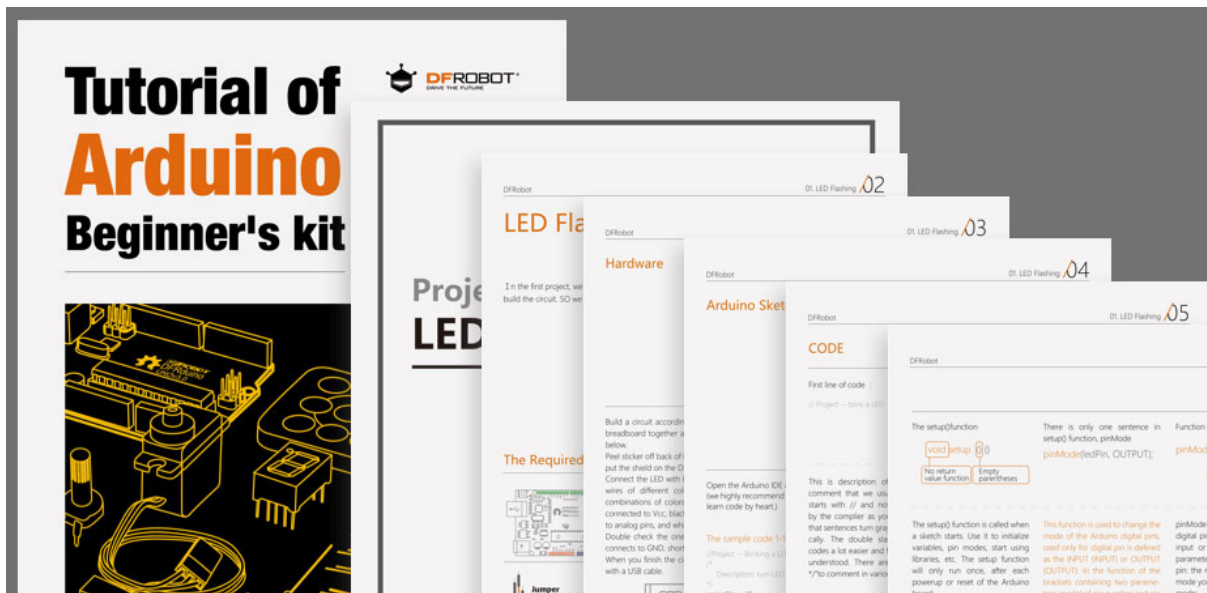
DETAILED TUTORIAL PROVIDED

Tutorial - Matched Project Card.
 Note: PDF Version only, you can print it by yourself if need. For more information, please click on the technical specification at the bottom of this page to view the document.

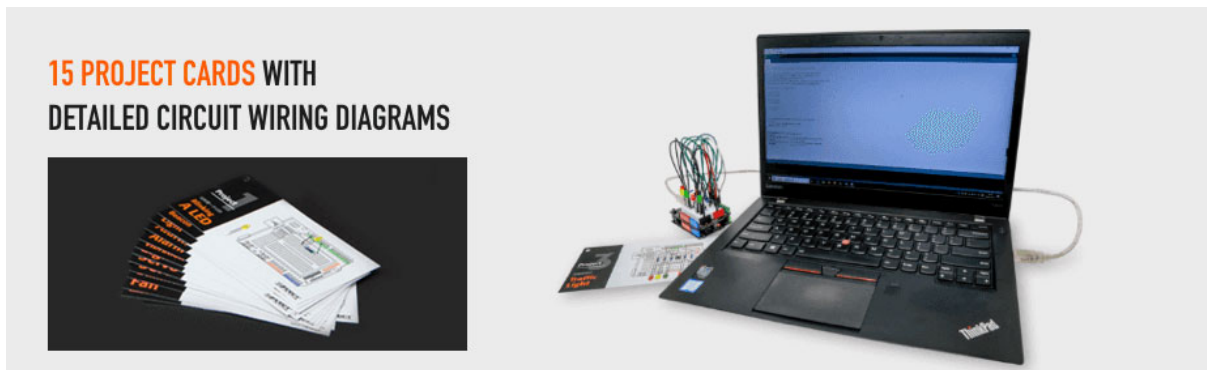
Help users to learn the knowledge of electronics and programming through 15 Arduino projects from easy to difficult.

| Programming Knowledge | Electronics Knowledge |
|--|---|
| • Learning variables | • Learn about resistance |
| • Recognition function | • Understanding light-emitting diodes |
| • Learn for loop | • The principle of learning keys |
| • Learn comparison operators | • Learn the knowledge of pull-up resistors and pull-down resistors |
| • Know the variable type | • Understand the knowledge of RGB LED |
| • Learn logical operators | • Learn to distinguish between common cathode RGB and common anode RGB |
| • Learn PWM knowledge | • Know the buzzer |
| • Learn the constraint() function, random() function | • Learn the difference between piezoelectric buzzer and electromagnetic buzzer |
| • Learn how to load the library | • Learn the difference between active buzzer and passive buzzer |
| • Learn the sin() function | • Learn the temperature measurement principle of LM35 temperature sensor |
| • Learn three functions related to tone | • Learn the principle of ball switch circuit |
| • Meet Arduino's communication partner-serial port | • Learn the circuit principle of photodiode |
| • Learn interrupt function attachInterrupt() | • Learn the circuit principle of potentiometer |
| • Learning interrupted knowledge | • Learn the principle of voltage division used by potentiometers |
| • Learn to call the servo <Servo.h> library | • Learn to use three potentiometers to change the R, G, B values of RGB LED |
| • Definition of learning library and object | • Learn the principle of relay |
| • Learn map function | • Learn the difference between DC motor, DC geared motor and steering gear |
| • Learn to use software knowledge for key debounce | • Know the infrared receiver |
| • Learn array knowledge | • Learn the difference between the common cathode and common yang of the digital tube |
| • Understand the working principle of digital tube | |

Ogni corso vi guiderà attraverso una rapida implementazione del progetto, stimolerà il vostro interesse per l'apprendimento, per poi approfondire la conoscenza dell'elettronica e della programmazione. A differenza di molti altri, questo tutorial spiega sistematicamente come interpretare il codice Arduino e come comprendere i principi dei circuiti elettronici, aiutandovi a realizzare progetti creativi. È suddiviso come segue: "elenco materiali -> collegamento hardware -> scrittura del codice -> revisione del codice -> revisione hardware".



Il kit include 15 schede con progetti e dettagliati schemi di montaggio. Gli studenti possono scegliere qualsiasi progetto e iniziare a creare ciò di cui sono interessati. Il kit è anche un aiuto efficace per gli insegnanti che vogliono fare un workshop a scuola.



| | | | |
|---------------------|---------------|----------------|-----------------------------|
| Jumper Cables (M/M) | Resistor 220Ω | Component List | Project 13 Motor Fan |
| Pushbutton | Relay | | |
| 130 Motor | Fan | Component List | Project 12 RGB Light Dimmer |
| 5MM LED | 5MM LED | | |

Motor Fan

Control the fan via a relay and understand the principle of driving a large current with a small current, all while completing a smart home project.

| | | | |
|---------------------|---------------|----------------|-----------------------------|
| Jumper Cables (M/M) | Resistor 220Ω | Component List | Project 12 RGB Light Dimmer |
| 10K Potentiometer | 5MM RGB LED | | |

RGB Light Dimmer

Learn knowledge relating to Pulse-Width Modulation (PWM) and use a potentiometer to change the colors of an RGB LED, all while completing a light interaction project.

Componenti elettronici di qualità

DFRobot



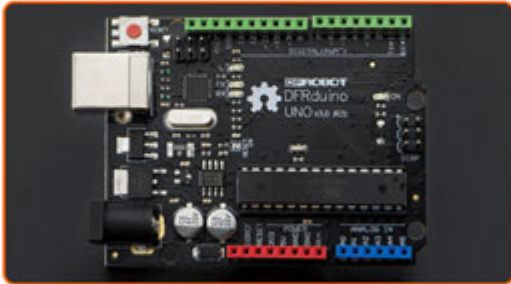
Products Organized in Their Own Bags
Convenient to store and easy to find

VS

Other Products



Disorganized
No storage places and difficult to find



Achieving 100% Quality Inspection
Quality assurance using premium technology

VS

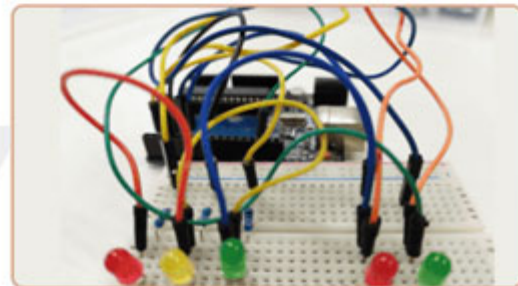


Poor Quality
Slipshod works with poor quality

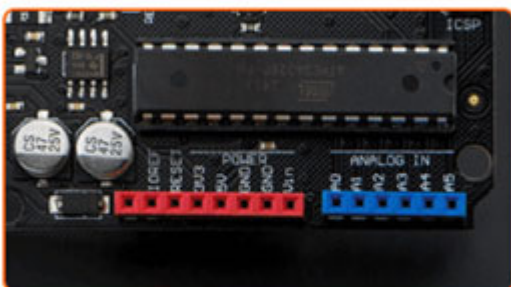


Jumper Wires Imported from Germany
Firm, thick, and difficult to break

VS



Ordinary Jumper Wires
Easy to break and hard to detect the broken wires when making projects

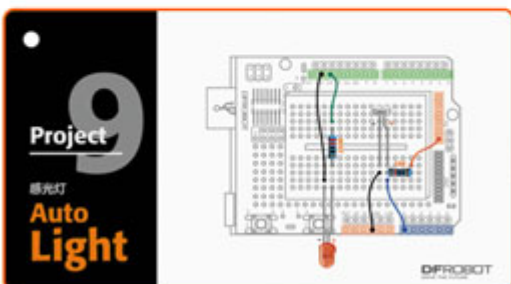


Ports Distinguishable by Color
Easy to distinguish A/D ports

VS

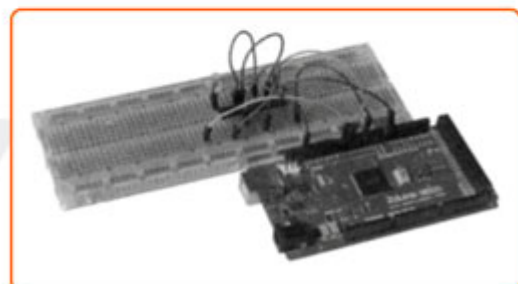


Only Black Ports
No way to distinguish ports from one another



Project Cards
Clear wiring diagram, easy to realize the project

VS



Electronic Material
The connection diagram is not clear and it is difficult to realize the project

Unboxing Video

Documentazione e link utili

- [WIKI \(DFRduino Beginner Kit For Arduino V3 SKU:DFR0100\)](#)
- [Beginner Kit Tutorial](#)
- [Sample Code](#)
- [Github Repository](#)
- [Four Best Starter Kits for Arduino Beginners](#)