



The **Starter Kit** walks you through the basics of using the Arduino in a hands-on way. You'll learn through building several creative projects. The kit includes a selection of the most common and useful electronic components with a book of 15 projects. Starting the basics of electronics, to more complex projects, the kit will help you control the physical world with sensor and actuators.

Projects you can make:

- 01 GET TO KNOW YOUR TOOLS an introduction to the basics
- 02 SPACESHIP INTERFACE design the control panel for your starship
- 03 LOVE-O-METER measure how hot-blooded you are
- 04 COLOR MIXING LAMP produce any colour with a lamp that uses light as an input
- 05 MOOD CUE clue people in to how you're doing

- 06 LIGHT THEREMIN create a musical instrument you play by waving your hands
- 07 KEYBOARD INSTRUMENT play music and make some noise with this keyboard
- 08 DIGITAL HOURGLASS a light-up hourglass that can stop you from working too much
- 09 MOTORIZED PINWHEEL a coloured wheel that will make your head spin
- 10 ZOETROPE create a mechanical animation you can play forward or reverse
- 11 CRYSTAL BALL a mystical tour to answer all your tough questions
- 12 KNOCK LOCK tap out the secret code to open the door
- 13 TOUCHY-FEEL LAMP a lamp that responds to your touch
- 14 TWEAK THE ARDUINO LOGO control your personal computer from your Arduino
- 15 HACKING BUTTONS create a master control for all your devices!

Once you've mastered this knowledge, you'll have a palette of software and circuits that you can use to create something beautiful, and make someone smile with what you invent. Then build it, hack it and share it. You can find the Arduino code for all these projects within the Arduino IDE, click on File / Examples / 10.StarterKit.

### The Starter Kit includes:

1 Projects Book (170 pages), 1 Arduino Uno, 1 USB cable, 1 Breadboard 400 points, 70 Solid core jumper wires, 1 Easy-to-assemble wooden base, 1 9v battery snap, 1 Stranded jumper wires (black), 1 Stranded jumper wires (red), 6 Phototransistor, 3 Potentiometer 10kOhms, 10 Pushbuttons, 1 Temperature sensor [TMP36], 1 Tilt sensor, 1 alphanumeric LCD (16x2 characters), 1 LED (bright white), 1 LED (RGB), 8 LEDs (red), 8 LEDs (green), 8 LEDs (yellow), 3 LEDs (blue), 1 Small DC motor 6/9V, 1 Small servo motor, 1 Piezo capsule [PKM17EPP-4001-B0], 1 H-bridge motor driver [L293D], 1 Optocouplers [4N35], 2 Mosfet transistors [IRF520], 5 Capacitors 100uF, 5 Diodes [1N4007], 3 Transparent gels (red, green, blue), 1 Male pins strip (40x1), 20 Resistors 220 Ohms, 5 Resistors 560 Ohms, 5 Resistors 1 kOhms, 5 Resistors

## 4.7 kOhms, 20 Resistors 10 kOhms, 5Resistors 1 MOhms, 5 Resistors 10 MOhms

THIS KIT FEATURES 15 SIMPLE PROJECTS THAT SHOW YOU HOW TO USE ARDUINO® TO TURN AN IDEA INTO REALITY. MORE IMPORTANTLY, IT PROVIDES THE BASIC KNOWLEDGE AND TOOLS THAT CAN BRING OUT YOUR INNER GENIUS AND FUEL YOUR CREATIVITY FOREVER.

You will see it doesn't take a lot of complicated mechanics or electronics to make something fun, to make things respond to the world around them, or to spark people's imagination. All that is called for is this kit, a few everyday items, and your own unique ideas. Because great interactive projects need more than just wires and components - they need smart makers, like you.

01 **GET TO KNOW YOUR TOOLS** an introduction to the concepts you'll need to use this kit  
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 04 **COLOR MIXING LAMP** produce any color with a lamp that uses light as an input  
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 15 **HACKING BUTTONS** create a master control for all your devices!

**ARDUINO.CC/STARTERKIT**  
 EVERYTHING YOU NEED FOR YOUR FIRST ARDUINO PROJECTS

THIS KIT INCLUDES	
1 PROJECTS BOOK (176 pages)	5 Diodes
1 ARDUINO UNO board R3	3 Transparent gels (R, G, B)
1 USB cable	1 Male pins strip (40x1)
1 Breadboard	20 Resistors 220 ohm
1 Easy-to-assemble base	5 Resistors 560 ohm
1 9V battery snap	5 Resistors 1 kilohm
70 Solid core jumper wires	5 Resistors 4.7 kilohm
2 Stranded jumper wires	20 Resistors 10 kilohm
6 Phototransistors	5 Resistors 1 megohm
3 Potentiometer 10 kilohm	5 Resistors 10 megohm
10 Pushbuttons	
1 Temperature sensor	
1 Tilt sensor	
1 LCD screen (16x2 characters)	
1 LED (bright white)	
1 LED (RGB)	
8 LEDs (red)	
8 LEDs (green)	
8 LEDs (yellow)	
3 LEDs (blue)	
1 Small DC motor 6/9V	
1 Small servo motor	
1 Piezo capsule	
1 H-bridge motor driver	
1 Optocoupler	
2 Mosfet transistors	
5 Capacitors 100µF	

You'll need some materials of your own as you progress through the projects, to make them really unique. At the very least you will need a 9V battery and a computer, but we recommend keeping some basic crafting materials handy - like paper, tape, markers and scissors. Suggested additional materials are listed in the details of each project.

**WARNING: CHOKING HAZARD**  
 This product contains small parts and should be kept out of the reach of children under the age of 3, because the parts or their pieces may present a choking hazard to small children.

**CAUTION**  
 This is an education product - not a toy. It is not intended for children under 8 years old.