Arduino® Starter kit R4

SKU:
K000007_R4 Arduino® Starter Kit R4

The Arduino Starter Kit R4 WiFi represents the next evolution in maker education, featuring the advanced Arduino UNO R4 WiFi board with enhanced capabilities including WiFi/Bluetooth connectivity, onboard LED matrix, extra peripherals, and cutting-edge AI integration. This comprehensive learning platform bridges traditional electronics education with modern IoT and AI technologies. **Great for:** Beginners, students, hobbyists, and families with tech-curious kids.

Benefits

Experience the Latest Arduino hardware
Step up to the Arduino UNO R4 WiFi, the most advanced and feature-rich version of the iconic UNO family.

Learn the basic of electronics
With the included project book, learn the basics of electronics, become familiar with electronic components and build your first Arduino project.
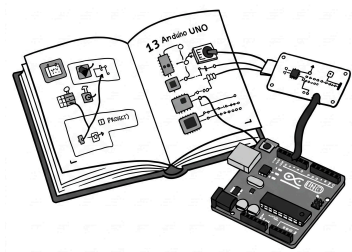
Explore New Creative Frontiers
Discover exciting new online projects which explore the possibilities the UNO R4 WiFi's enhanced features bring, including capacitive sensing, mouse/keyboard simulation, and an onboard LED matrix. New projects coming on regular bases (3 months).
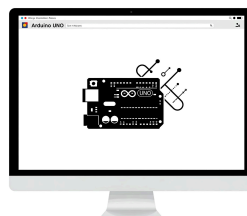
Unleash Your Inner Innovator with GenAI
Leverage the power of AI to build unique projects and push the boundaries of your creativity with an intelligent coding assistant by your side.

User journey

Start with Hands-On Learning: Dive into 13 step-by-step projects in the included physical book, gaining a solid foundation in electronics.

Expand Your Horizons Online: Explore a wealth of additional online projects designed to unlock the full potential of the UNO R4 WiFi.

Keep Innovating with GenAI: Get started with GenAI and provide prompt templates to fuel your ongoing exploration and creative projects.

Technical Specifications

Bill of materials

1 Project book (150 pages)
1 LCD screen (16x2 characters)
3 Capacitors 100µF
1 LED (bright white)
1 LED (RGB)
3 Transparent gels (R, G, B)
1 Arduino UNO R4 WiFi board
3 Diodes
1 USB-C cable
1 Breadboard
8 LED (red)
1 Male pins strip (40x1)
3 Resistors 560 ohm

70 Solid core jumper wires
3 LED (blue)
3 Resistors 1 kilohm
2 Stranded jumper wires
1 Small DC motor 6/9v
3 Resistors 4.7 kilohm
4 Phototransistors
1 Small servo
11 Resistors 10 kilohm
3 Potentiometers
1 Piezo capsule
7 Resistors 1 megohm

6 Pushbuttons
1 H-bridge motor driver
3 Resistors 10 megohm
1 Temperature sensor
2 Optocoupler
1 Tilt sensor
1 Mosfet transistors
1 Easy-to-assemble base
8 LED (green)
11 Resistors 220 ohm
1 9v battery snap
8 LED (yellow)

UNO R4 Tech specs

Microcontroller	Renesas RA4M1 (Arm® Cortex®-M4)	
USB	USB-C®	Programming Port
Pins	Digital I/O Pins	14
	Analog input pins	6
	PWM pins	6
Communication	I2C	2
	CAN	1
Power	Circuit operating voltage	5 V
	Input voltage (VIN)	6-24 V
Clock speed	Main core	48 MHz
Memory	RA4M1	256 kB Flash, 32 kB RAM
	ESP32-S3	384 kB ROM, 512 kB SRAM