UNO R3 ULTIMATE KIT User Guide

ULTIMATE KIT including:

1pcs UNO R3
1pcs USB cable
1pcs 65 jumper wires
1pcs 4 pin dupont line(male to female)
1pcs 400 Point BREADBOARD
1pcs Extension Plate Containing Breadboard Plate
1pcs MPU 6050 Gyroscope module
1pcs hc-sr04 ultrasonic sensor module
1pcs UNL2003 driver board
1pcs DC motor
1pcs 5V stepper motor
1pcs SG90
1pcs LCD1602 without back light
1pcs PS2 game joystick module
1pcs one road relay module
1pcs 9V Battery Connector
1pcs RGB led CC
25pcs led (White,Red, Green, Yellow,Blue)
100pcs resistance(10R,100R,220R,330R,1K,2K,5.1K, 10K, 100K,1M)
5pcs PN2222 , BC547 and BC557
5pcs 1n4001 diodes
1pcs Thermister
5pcs 22pf and 1uf capacitor
2pcs 50V 10uf capacitor and 50V 100UF capacitor
1pcs potentiometer
1pcs passive buzzer
1pcs 74HC595N
1pcs MAX7219
1pcs L293D
1pcs Infrared receiving head
2pcs 5mm LDR
5pcs Button Switch
1pcs IR remote control
1pcs one digital tube
1pcs four digital tube
1pcs 8*8 dot matrix tube

（UNO R3）

The Arduino UNO is the best board to get started with electronics and coding. If this is your first experience tinkering with the platform, the UNO is the most robust board you can start playing with. The UNO is the most used and documented board of the whole Arduino family.

Getting Started with Arduino UNO

Document index：

https://www.arduino.cc/en/Guide/ArduinoUno

Software development tools download index:
https://www.arduino.cc/en/Guide/ArduinoUno

（MPU 6050 Gyroscope module）

Reference index:

https://lastminuteengineers.com/mpu6050-accel-gyro-arduino-tutorial/
https://www.youtube.com/watch?v=wTfSfhjhAU0

(HC-SR04 Ultrasonic Sensor)

Reference index:
https://components101.com/sensors/ultrasonic-sensor-working-pinout-datasheet

(UNL2003 driver board)

Reference index:

https://components101.com/sensors/ultrasonic-sensor-working-pinout-datasheet
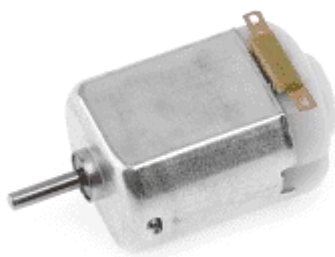
(DC MOTOR)

(stepper motor)

Reference index:

https://www.makerguides.com/28byj-48-stepper-motor-arduino-tutorial/

https://www.electronics-tutorials.ws/io/io_7.html

(SG90)

Reference index:

https://datasheetspdf.com/pdf/791970/TowerPro/SG90/1

https://www.electronics-lab.com/project/using-sg90-servo-motor-arduino/

(LCD1602)

Reference index:

https://lastminuteengineers.com/arduino-1602-character-lcd-tutorial/

https://www.youtube.com/watch?v=S4ya3Q7uhJs

(PS2 game joystick module)

Reference index:

https://arduinomodules.info/ky-023-joystick-dual-axis-module/

https://www.youtube.com/watch?v=MlDi0v09Evg

(one road relay module)

Reference index:

https://lastminuteengineers.com/one-channel-relay-module-arduino-tutorial/

https://www.youtube.com/watch?v=7tUGUXyloXQ

(Thermister)

Reference index:

https://www.engineersgarage.com/electronic-projects/heat-sensor-using-thermister/

(potentiometer)

Reference index:

https://www.arduino.cc/en/tutorial/potentiometer

Reference index:

https://www.youtube.com/watch?v=dHYKRrlPNzM