



## Raspberry Pi Course – Level Beginner

The Raspberry Pi is a fully-fledged mini computer, capable of doing whatever you might do with a computer. It comes with 4x USB, HDMI, LAN, built-in Bluetooth/WiFi support, 1GB RAM, 1.2GHz quad-core ARM CPU, 40 GPIO (General Purpose Input Output) pins, audio and composite video output, and more. You plug it into a monitor and attach a keyboard and mouse.

Here you'll learn about your Raspberry Pi, what things you need to use it, and how to set it up.

Like LED, Push Button and Camera module to make a motion picture.

## Requirement :

- Components : Raspberry Pi Kit
- Required Laptop with internet connection
- No prior knowledge in programming or electronics

## Setting up your Raspberry Pi

- Introduction
- What you will need
- Set up your SD card
- Connect your Raspberry Pi
- Start up your Raspberry Pi



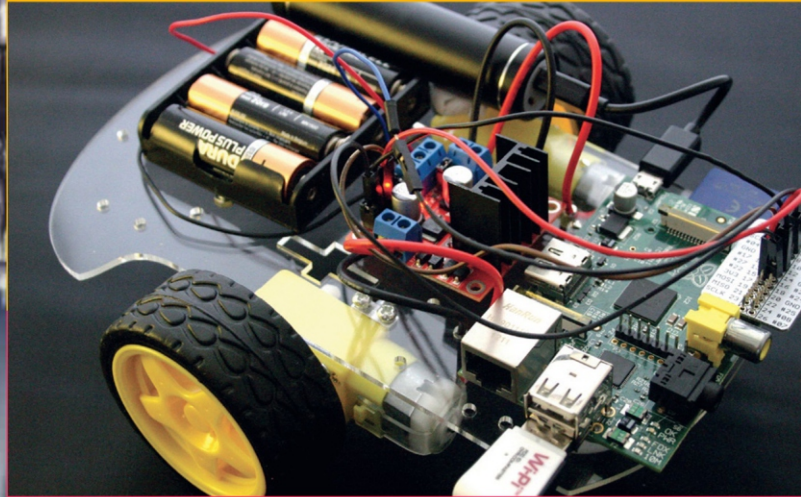
## Using your Raspberry Pi

- Introduction
- Raspberry Pi Desktop
- Keyboard and mouse settings
- Connecting to the internet
- Setting up the sound
- Installing software
- Updating your Raspberry Pi
- Accessing your files
- Using the terminal
- Configuring your Raspberry Pi



## Robot antenna

- Introduction
- Make an antenna
- Connect your antenna
- Make the antenna flash with code
- Make a cardboard robot
- Challenge: beeps and flashes



## Push Button Stop Motion

- Introduction
- Connect the camera
- Test the camera
- Take a picture with Python
- Connect a hardware button
- Take a selfie
- Stop motion animation
- Generate the video

## Getting started with the Camera Module

- Introduction
- What you will need
- Connect the Camera Module
- How to control the Camera Module via the command line
- How to control the Camera Module with Python code
- Take still pictures with Python code
- Record video with Python code

