



## JoyPi



## Technical Specifications

Model	JoyPi
Article No.	RB-JoyPi
Functions	Completely equipped set
	Already integrated in a case
	21 lessons, suitable for beginners and
	Advanced
	Integrated camera for photos and video recordings
Display	7" Touchscreen Display
	Resolution: 1024x600
Included Sensors	GPIO LED indicator, breadboard, LCD module, circuit,
	buzzer, sound sensor, motion sensor, ultrasonic sensor,
	servo interface, stepper motor, tilt sensor, infrared
	sensor, touch sensor, DH11 sensor, relay, matrix but-
	tons, independent buttons, RFID module, switch
Compatible to	Raspberry Pi Zero, 2B, 3B, 3B+
Scope of delivery	JoyPi Set (Raspberry Pi not included)
EAN	4250236817330

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## SCHEMATIC VIEW



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1	Raspberry Pi
2	GPIO LED Display
3	Breadboard - for creating custom circuits with external modules
4	16x2 LCD Module (MCP23008)
5	Power supply
6	8x8 LED Matrix (MAX7219)
7	7 Segment LED Display (HT16K33)
8	vibration module
9	Light sensor - for measuring light intensity (BH1750)
10	Buzzer - for generating alarm tones
11	sound sensor
12	Motion Sensor (LH1778)
13	Ultrasonic sensor - Used for distance measurement
14 / 15	Servo interfaces - For connecting servomotors
16	stepper motor interface
17	tilt sensor (SW-200D)
18	infrared sensor
19	touch sensor
20	DH11 Sensor - For measuring humidity and temperature
21	Relays - For opening and closing electronic circuits
22	button matrix
23	Independent buttons
24	RFID Module - For reading and writing data via RFID/NFC (MFRC522)
25	Switch - For switching between sensors and modules

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## INCLUDED LESSONS

1	Using the buzzer for alerts or notifications
2	Controlling the buzzer by pressing the keys
3	How a relay works and how to control it
4	Send a vibration signal with the vibration module
5	Detecting noises with the sound sensor
6	Measuring brightness with the light sensor
7	Measurement of room temperature and humidity
8	Detecting movements with the motion sensor
9	Measuring distances with the ultrasonic sensor
10	Controlling the LCD Display
11	Reading and writing RFID cards with the RFID module
12	Use stepper motor and perform stepping movements
13	Control of servo motors via the servo interfaces
14	Controlling the 8x8 LED matrix
15	Controlling the 7-segment display
16	Detecting touch with the touch sensor
17	Detecting tilt with the tilt sensor
18	Using and controlling the button matrix
19	Controlling and using the IR Sensor
20	Creating your own custom circuit with the breadboard
21	Photographing with the Raspberry Pi Camera

Published: 20.08.2018

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