

joy-it



JOY-IT

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1. OVERVIEW

Dear customer,

Thank you very much for choosing our product. In the following we will show you what has to be observed during commissioning and use.

Should you encounter any unexpected problems during use, please feel free to contact us.

This is just a quick guide. On our website: <http://joy-pi.net/> you can find an even more detailed guide, in which each module is explained individually with the help of a programming example.

We look forward to seeing what you will do with our Joy-Pi.

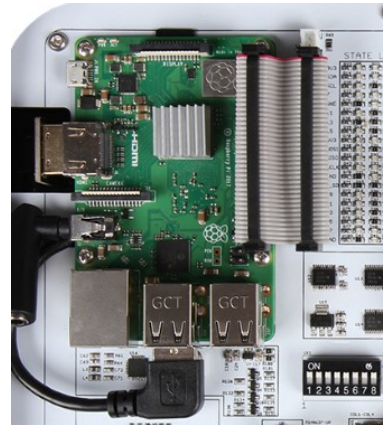
2. INITIAL STARTUP

Before you can put the Joy-Pi into operation, insert the supplied Micro-SD card into the slot provided on the back of your Raspberry Pi.

Then plug the Aux adapter into the Aux port of the Raspberry Pi.

Plug the HDMI cable, which is located on the left side of the case, into the Raspberry Pi's HDMI port.

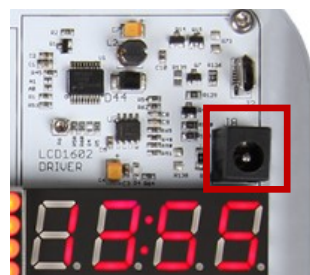
Now place the Raspberry Pi in the Joy-Pi as shown in the picture below and tighten the four screws.



Now plug the USB cable into one of the USB ports and connect the GPIO bar of the Raspberry Pi to the one on the Joy-Pi, using the supplied cable.

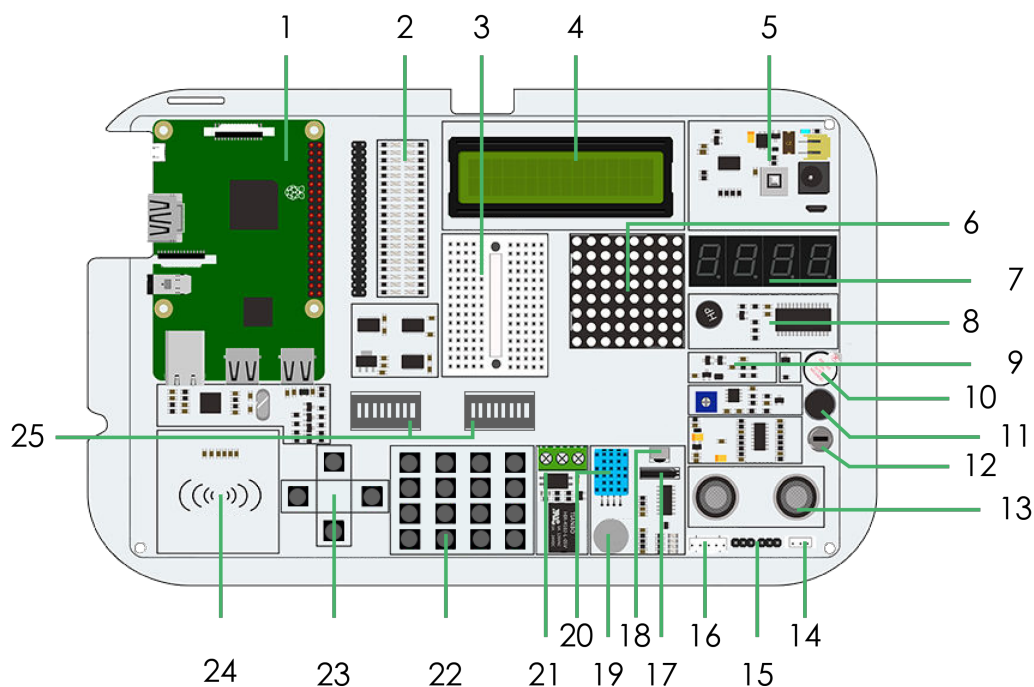
To power the Joy-Pi, plug the supplied power cord into the port on the right side of the case.

Your Joy-Pi is now ready for use.



3. DETAILS

On this page you can find a connection plan, which will be described on the next page in more detail.



3. DETAILS

1	Raspberry Pi
2	GPIO LED Display
3	Breadboard - for creating custom curciuts 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 - to measure the light intensity (BH1750)
10	Buzzer - to generate alarm tones
11	Sound sensor
12	Motion sensor (LH1778)
13	Ultrasonic sensor - Used for distance measurement
14 / 15	Servo interfaces - for connecting servo motors
16	Stepper motor interface
17	Tilt sensor (SW-200D)
18	Infrared sensor
19	Touch sensor
20	DHT11 Sensor - for measuring humidity and temperature
21	Relay - for opening and closing electronic circuits
22	Key matrix
23	Independent keys
24	RFID module - for reading and writing data via RFID/NFC (MFRC522)
25	Switch - for switching between sensors and modules

4. CHANGING MODULES



The JoyPi board contains 2 switching units. Each unit contains 8 switches. The switches make it possible to switch between the use of sensors and modules.

Since the Raspberry Pi has only a limited number of GPIO pins, we need the switches to be able to use more sensors.

Switches must be used for the following modules:

Sensors / Modules	Switching Unit	Switches
Keyarray	Left	1 - 8
Independent Keys	Left	1 - 8
Vibration modul	Right	1
Tilt sensor	Right	2
Stepper motor	Right	3, 4, 5, 6
Servo motor	Right	7, 8

5. INFORMATION AND TAKE-BACK OBLIGATIONS

Symbol on electrical and electronic equipment



This crossed-out dustbin means that electrical and electronic equipment does not belong in the household waste. You must return the old appliances to a collection point. Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.

Return options

As an end user, you can return your old appliance (which essentially fulfils the same function as the new appliance purchased from us) free of charge for disposal when you purchase a new appliance. Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours

Simac GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

Possibility of return in your area

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by e-mail at Service@joy-it.net or by telephone.

Information on packaging

If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

6. SUPPORT

We also support you after your purchase. If there are any questions left or if you encounter any problems, please feel free to contact us by mail, phone or by our ticket-system on our website.

E-Mail: service@joy-it.net

Ticket-System: <http://support.joy-it.net>

Telefon: +49 (0)2845 98469 – 66 (10- 17 o'clock)

For further information please visit our website:

www.joy-it.net