



MULTIMEDIA CASE

for the Raspberry Pi 4

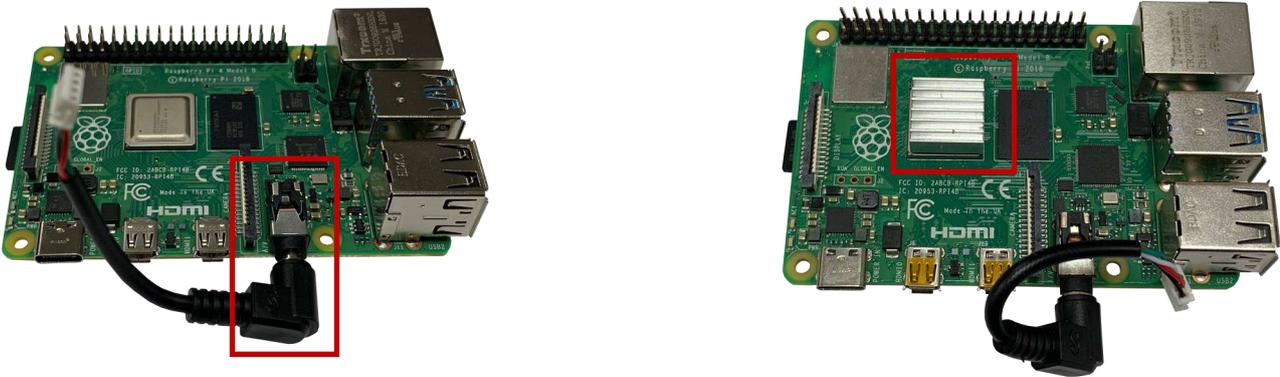
JOY-IT

1. ASSEMBLING

1. The first step in assembling the housing is to disassemble the case into its individual parts. You can easily pull it apart as the case is attached with magnets.



2. Then connect the AUX plug to the jack socket from the Raspberry Pi. Now insert the already written SD card into the Raspberry Pi. You find more information about that in **Chapter 2: Software installation**. Also attach the heat sink to the CPU of the Raspberry Pi.



3. Afterwards, connect the small board to the two microHDMI connectors. Optionally, you can now connect the cable from the AUX connector to the appropriate socket on the circuit board. The cable should lie as flat as possible against the board, otherwise space problems may occur.



- Now place the Raspberry Pi with the circuit board on the bottom of the case.



- In the following step, attach the center piece and push the connection panel into the center piece.



- Therefore, place the large board on the GPIO bar of the Raspberry Pi. The circuit board is inserted at a slight angle so that the connections fit easily into the panel.
Important:
Should you use the audio cable, care must be taken to ensure that the cable does not get under the jumper pins on the bottom, otherwise the top PCB will not mount correctly.



- Connect now the fan, which is attached at the cover, to the big board. Make sure that the red cable is connected to "+" and the black cable to "-".



- Furthermore, place the cover on the case. Your case is now completely assembled.



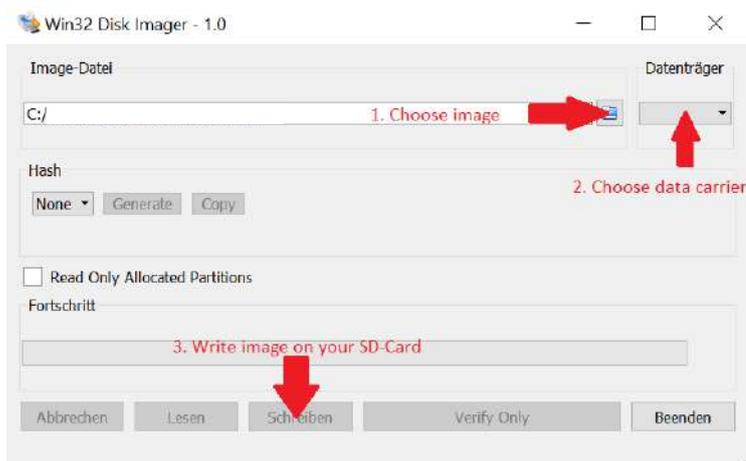
Your case has a removable lid, so the GPIO bar of your Raspberry Pi is still usable despite being in a case.

2. SOFTWARE INSTALLATION

Before this housing can be used, an operating system must be installed on the SD card. If you have already written an image file to an SD card or you bought a set with an written SD card, you can skip this chapter. Our configured

LibreElec-Image can be downloaded [here](#).

- Download the image file (.zip format) to your PC. After unpacking the file you will get a file with the extension .img.
- Connect a microSD card to your PC.
- Start the [Win32-Disk-Imager](#) and select
 - the downloaded image file.
 - the drive to be written on.
 - Click on Write to write the image onto the SD card.
- Now the card is written with the operating system and it can be inserted into the microSD card slot of the Raspberry Pi.

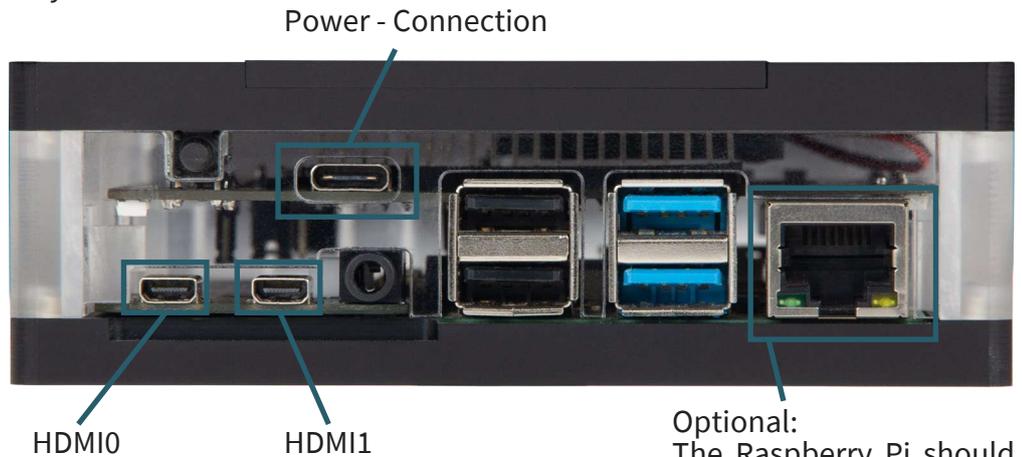


3. CONNECTION

In this chapter you will see what you have to connect to your TV to transmit the Multimedia Case image. When first setting up the Raspberry Pi, however, a mouse and keyboard must be connected temporarily.

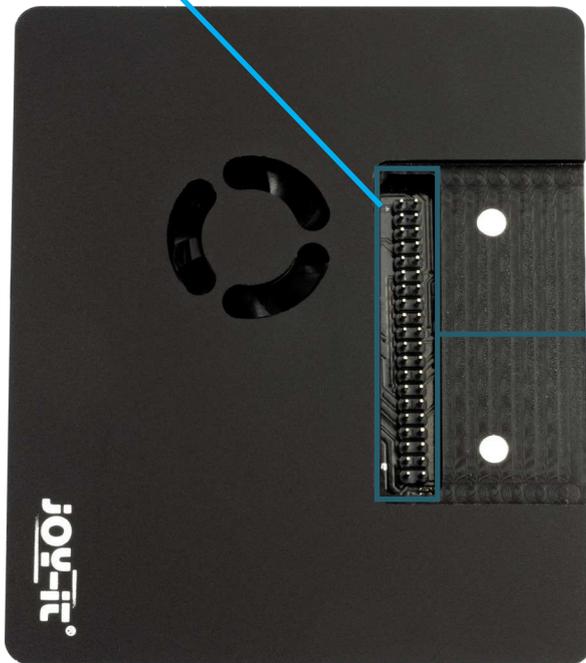
microHDMI - Connection

HDMI0 should be used if only one monitor is used. Especially when 4K resolution is required.



Optional:
The Raspberry Pi should have a connection to the network via cable or Wifi.

Pin 1 marking

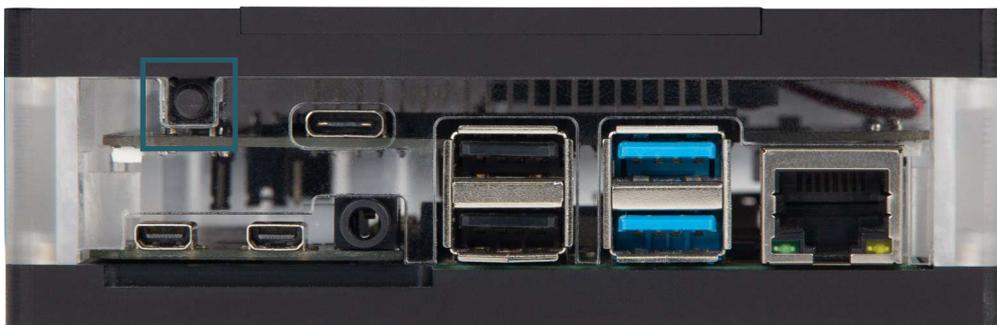


GPIO - Pinout

3.3V DC	1	2	5V DC
SDA1, I2C	GPIO 2	3	4
SCL1, I2C	GPIO 3	5	6
GPCLK0	GPIO 4	7	8
Ground	9	10	GPIO 14
GPIO 17	11	12	GPIO 15
GPIO 27	13	14	GPIO 18
GPIO 22	15	16	GPIO 23
3.3V DC	17	18	GPIO 24
MOSI, SPI0	GPIO 10	19	20
MISO, SPI0	GPIO 9	21	22
CLK, SPI0	GPIO 11	23	24
Ground	25	26	GPIO 8
ID_SD	GPIO 0	27	28
GPIO 5	29	30	GPIO 7
GPIO 6	31	32	GPIO 1
PWM1	GPIO 13	33	34
MISO, SPI1	GPIO 19	35	36
GPIO 26	37	38	GPIO 12
Ground	39	39	GPIO 20

4. PUTTING INTO OPERATION

When you have successfully connected the case to your device, you can start the Raspberry Pi with the on/off button.

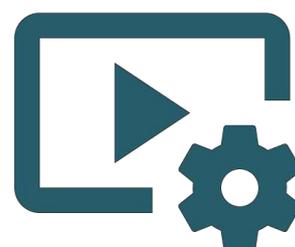


When you start the Raspberry Pi for the first time, you will be asked to make the initial settings on the Raspberry Pi and the case. This cannot be cancelled.

5. USAGE

In our prepared image you can find addons to personalize your Multimedia Case.

You can find these addons in Kodi under **Add-ons** → **Program add-ons**. In the following you will find a more detailed explanation of the functions of these addons.

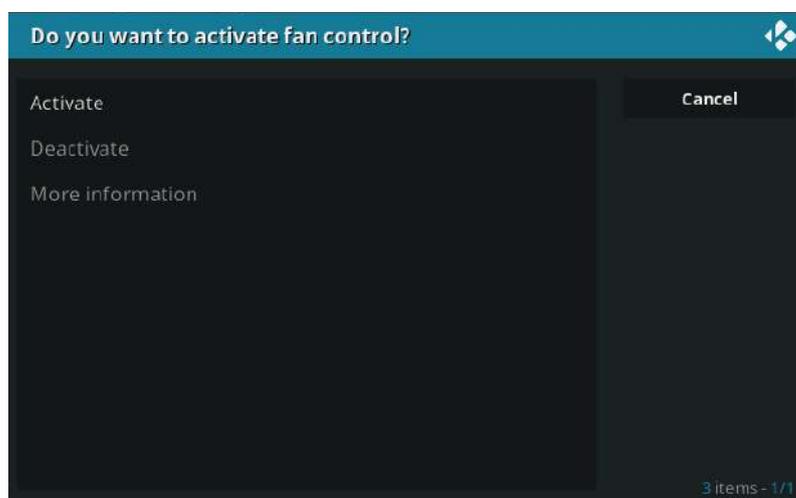
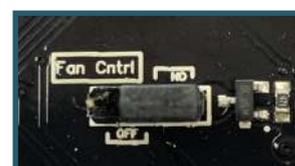


Multimedia Case Configuration

With this addon you can activate or modify certain functions of the Multimedia Case to personalize it even more.

Fan Control

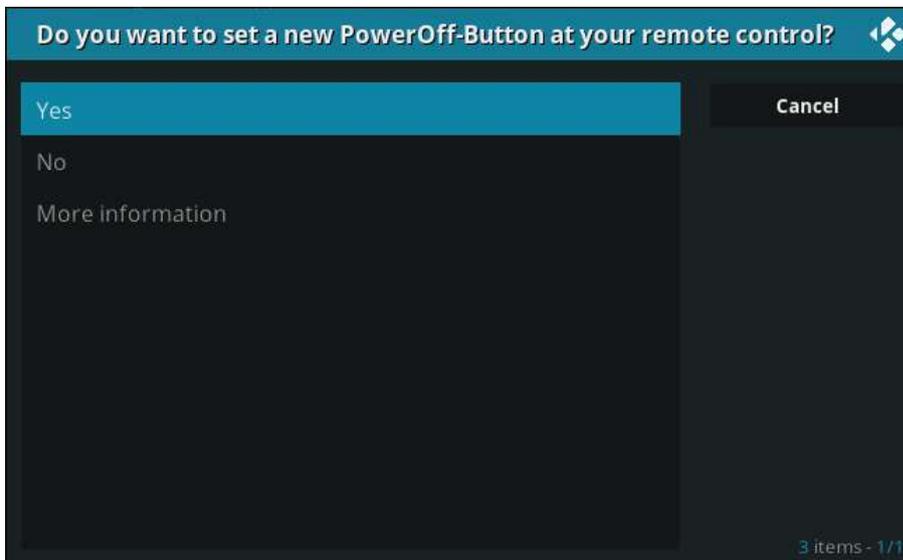
This allows you to adjust the fan to the temperature of the Raspberry Pi. For this purpose the jumper, which is marked as FanCntrl, must be set to ON. If the jumper is set to OFF, the fan runs permanently at its maximum speed.



PowerOff-Button

With this program you can set a button of any remote control as on/off button of the Multimedia Case. More buttons to control the system can be configured in the IR Control Configuration addon.

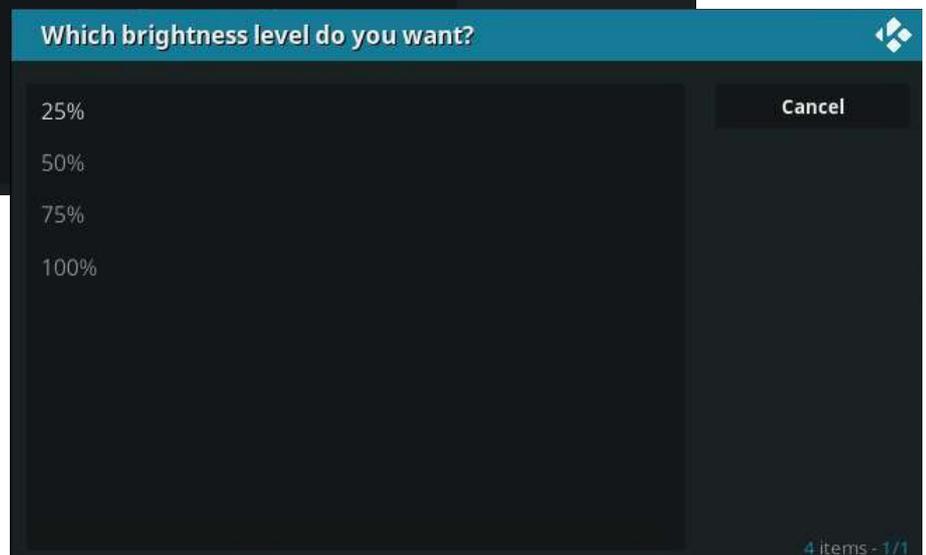
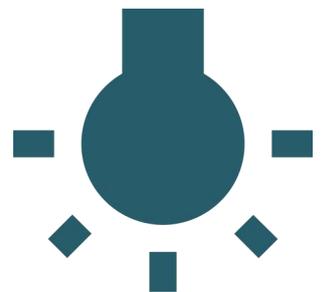
When a new key is learned, the Multimedia Case starts flashing colourfully. Now you have to press any key three times to set it as PowerOff-Button. When a signal is received, the Multimedia Case lights up white. However, if any key is pressed other than the previous one, the case will light up red and you have to press any key three times again. The case will light green if a new PowerOff-Button has been successfully set.



The Raspberry Pi will restart after successful adjustment.

Multimedia Case LED Configuration

This addon allows you to adjust the LEDs of the case. In this addon you can select different effects or static colours and adjust their brightness.



The Raspberry Pi will restart after successful adjustment.

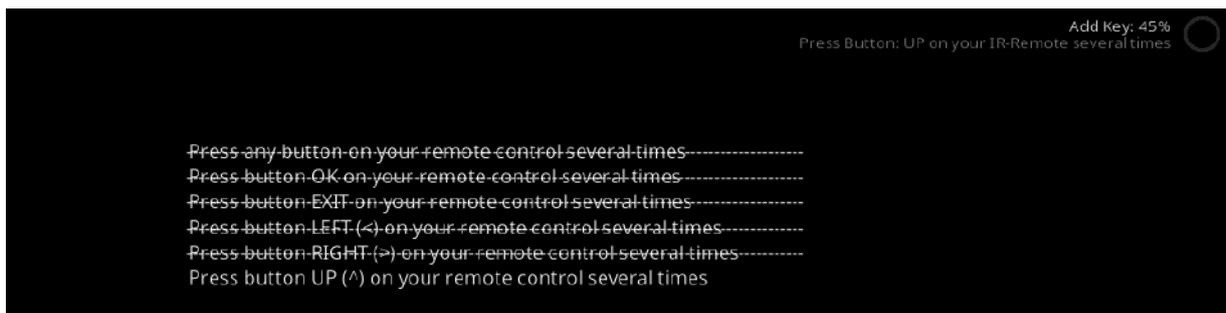
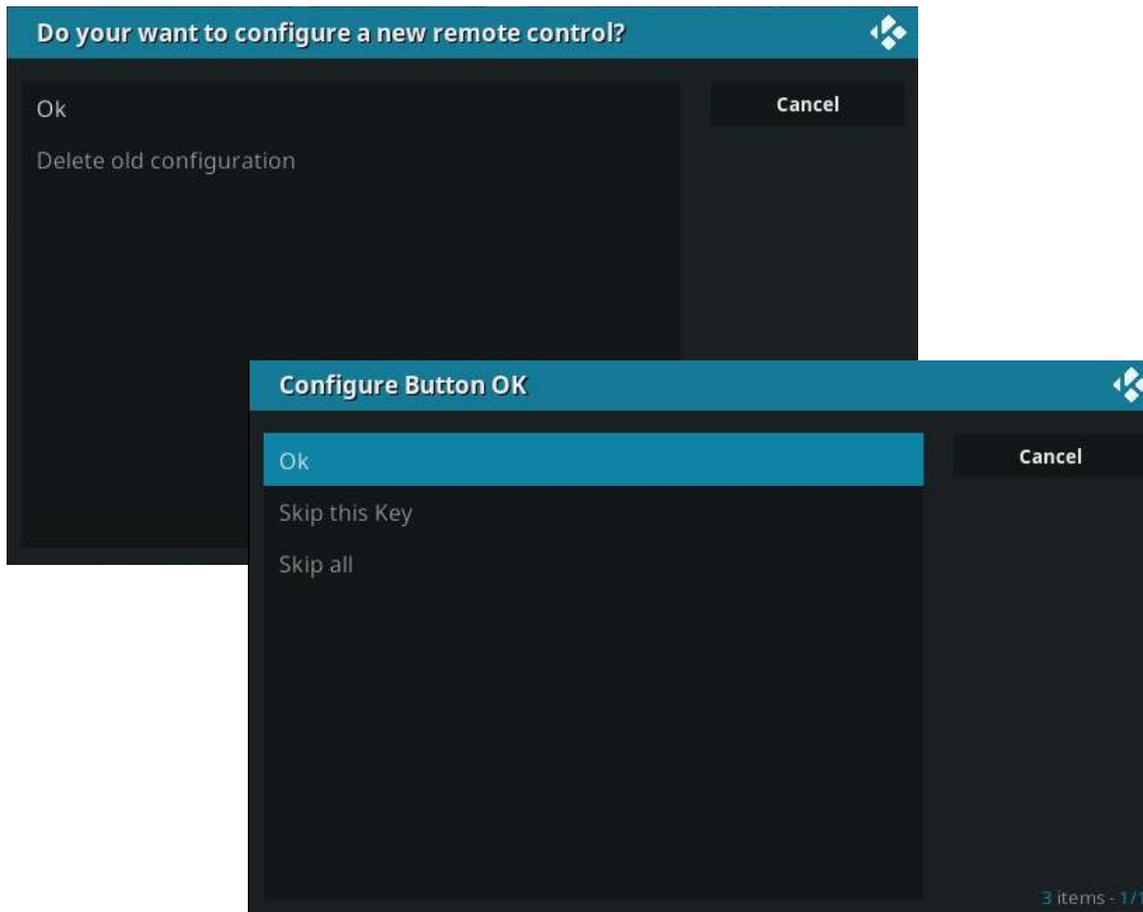


IR Control Configuration

With this addon, you can configure the remote control of your choice. This is useful if you want to use a separate remote control for operation in Kodi and don't want to control Kodi with HDMI-CEC, i.e. with the remote of your TV.

The addon will guide you through and save each button on the remote control that is necessary to use Kodi, so you don't need to have a keyboard or mouse connected to the Raspberry Pi anymore.

Note that you will not get any feedback when pressing a key but only a message when a key has been set.



The Raspberry Pi will restart after successful adjustment.

6. FURTHER INFORMATION

Our Information and Take-back Obligations according to the German Electronic Law (ElektroG)

Symbol on Electrical and Electronic Products:

This crossed-out bin means that electrical and electronic products do not belong into the household waste. You must hand over your old appliance to a registration place. Before you can hand over the old appliance, you must remove used batteries and replacement batteries which are not enclosed by the device.



Return Options:

As the end user, you can hand over your old appliance (which has essentially the same functions as the new one bought with us) free of charge for disposal with the purchase of a new device.

Small devices, which do not have outer dimensions bigger than 25 cm can be handed in for disposal independently of the purchase of a new product in normal household quantities.

1. Possibility of return at our company location during our opening hours

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

2. Possibility of return nearby

We will send you a parcel stamp with which you can send us your old appliance free of charge. For this possibility, please contact us via e-mail at service@joy-it.net or via telephone.

Information about Package:

Please package your old appliance safe for transport. Should you not have suitable packaging material or you do not want to use your own material, you can contact us and we will send you an appropriate package.

7. SUPPORT

If any questions remained open or problems may arise after your purchase, we are available by e-mail, telephone and ticket support system to answer these.

E-Mail: service@joy-it.net

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

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

For further information visit our website:

www.joy-it.net