

FRONT PANELS ▪ ENCLOSURES ▪ MILLING PARTS



# INSTRUCTION RASPBERRY PI HOUSING SCRIPT

# Front Panel Designer

## Raspberry Pi Housing

### Script



#### 1) INSTALL SCRIPT

You are already working with Front Panel Designer? If not, download the program and install it. Then download the script. Open Front Panel Designer and go to „Edit -> Scripts“. Go to „Add“ and select the script. You can now find the script under “User scripts“.

#### 2) SELECT RASPBERRY PI MODEL

This option defines whether the view holes for the LEDs are positioned on the left or the right of the slot for the SD card.

#### 3) DETERMINE THE ACCESSIBILITY OF CONNECTIONS

Under „Add cutouts“, it can be specified which connections of the Raspberry Pi are allocated cutouts in the housing, and are thus accessible from the outside. If a connection is deselected, the cutout is replaced by a cavity. This means the connection has sufficient space for its installation in the housing, but it is no longer accessible from outside.

#### 4) SPECIFY DIMENSIONS

The dimensions for the smallest housing possible in the script are as follows:

**Height:** 38mm

**Width:** 65mm

**Depth:** 91mm

**The housing can be enlarged using the relevant input fields.**

**Height:** The height can be adjusted without restrictions.

**Width:** The width can be adjusted without restrictions.

**Depth:** The depth can be adjusted under certain conditions.

The minimum depth of the housing is required if both the ETHERNET/USB ports, as well as the SD card slot are to be accessible from outside. If this is not required for either of these two sides, the depth can be increased. The corresponding check in the box for the relevant ports under “Add cutouts“ must then be removed.

#### **Optional: Mounting height**

The mounting height of the printed circuit board can be determined in the input field „Standoff height/Spacer“. You require appropriate spacers (available e.g. at buerklin.com). The script creates countersunk holes for M2.5 screws according to DIN 74A. To circumvent the need to purchase spacers, the script provides the alternative of using standoffs. You then receive the housing with threaded standoffs already glued.

#### 5) DETERMINE COLORS

Select the colors for your housing.

#### 6) CREATE

Once you have configured your housing as desired, click „Create“ to complete the process. Your files will be created and additional drilled holes, millings or engravings can be added.

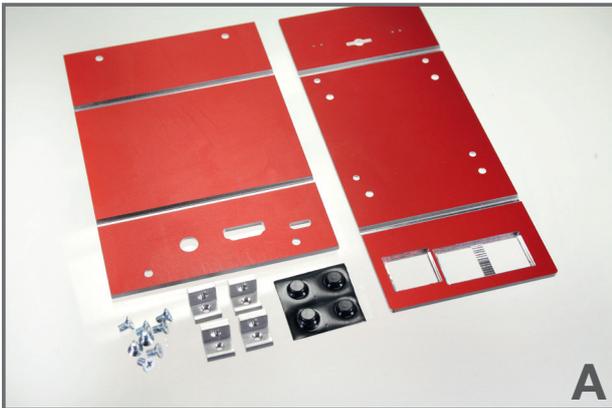
## 7) EDIT

To make adjustments to the size or regarding the slots, go back to the script window. By clicking „Start“ you call up the dialog box again and you can edit your settings. This creates new data however.

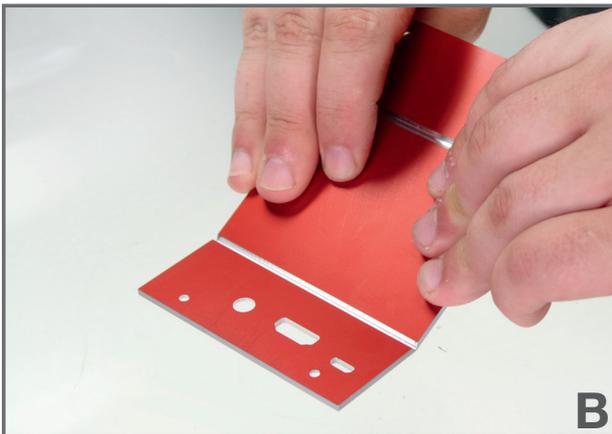
## 8) ORDER

Once you have completed your Raspberry Pi housing, you can place an order using the order function. Remember also to order the necessary additional materials such as brackets, screws and rubber feet.

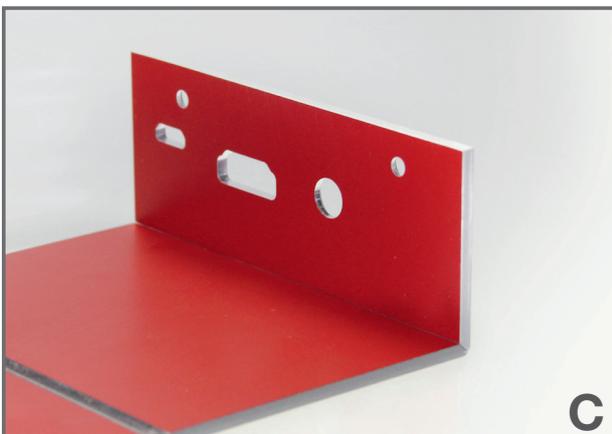
## 9) MOUNT



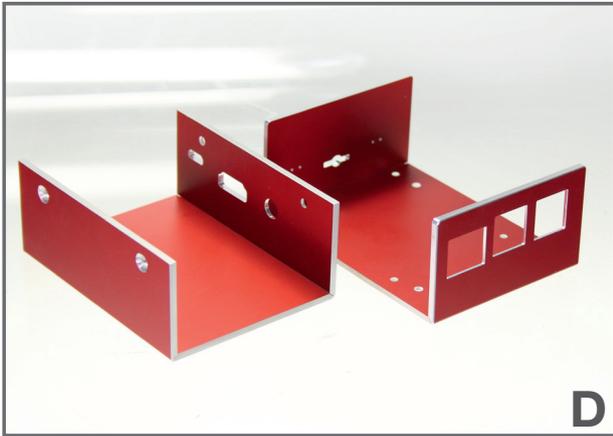
**A:** To mount the housing you need four housing brackets, eight M3x5 screws according to DIN 74A, and four rubber feet, all of which you can order directly from Schaeffer AG. Required tools: a screwdriver.



**B:** The housing parts are provided with cavities that allow you to bend the panels into shape yourself. We recommend you place the side to be bent on a firm surface and to bend carefully by hand.



**C:** The geometry of the cavity allows you to easily bend the parts slightly over 90 degrees. This is necessary in order to achieve an optimal gap size. Make sure that both sides are bent equally.



**D:** Both parts should now look as shown in the figure.



**E:** The housing brackets should be mounted as shown in the figure so that the housing can be closed easily with the Raspberry Pi.



**F:** The housing brackets should still be somewhat movable before closing the housing.



**G:** Now the Raspberry Pi can be fastened to the spacers you have chosen in the housing. When closing the housing, the cover, as shown in figure F, is folded over the housing. The connections on this side should easily snap into the housing.



**H:** Before tightening the final screws, the cover can be easily aligned.



**I:** Now fasten the rubber feet to the bottom and the Raspberry Pi housing is complete.