



7" Touchscreen case for Raspberry Pi 4 + internal fan

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Summary

Case for Raspberry Pi 7" Touchscreen and Raspberry Pi 4 Features Internal fan mount (40mm x 40mm x10) Thread inserts...



14.32 hrs



6 pcs



0.20 mm



0.40 mm



PET



157 g



Prusa
MK3/S/S+

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Tags: [case](#) [fan](#) [raspberrypi](#) [raspberrypi4](#) [raspberrypicase](#) [touchscreen](#) [coolingfan](#) [raspberrypi4bcase](#) [40mmfan](#) [threadedinsert](#) [7touchscreen](#) [pitouchscreen](#) [raspberrytouchscreen](#) [touchscreencase](#)

Case for Raspberry Pi 7" Touchscreen and Raspberry Pi 4

*** New case for Raspberry Pi Touch Display 2

***Updates

- Alternative top case part with additional slot for camera ribbon cable, see subfolder "case top v2".

Features

- Internal fan mount (40mm x 40mm x10)
- Thread inserts (pi case)

Alternative mounting brackets:

- **Plate mounting bracket for 7" touchscreen case**
- **V-Slot profile 2020 mounting bracket for 7" touchscreen case**

Required parts

- Raspberry Pi 4B
- Raspberry Pi 7-Inch Touch Screen Display
- Fan 40x40x10, 5V → **Noctua NF-A4x10 5V incl. anti-vibration mounts**
- 4x Anti-vibration mounts (See fan)
- 2x 1P Single Dupont connectors (For fan)

Mount Raspberry Pi case (top / botton parts)

- 4x M3 thread inserts → **Ruthex RX-M3x5.7**
- 4x Cylindrical head screw M3 x 12mm

Mount Raspberry Pi case (display / stands / botton parts)

- 4x Cylindrical head screw M3 x 12mm

Mount Raspberry Pi / fan

- 4x Cylindrical head screw M2.5 x 16mm

Print instructions

Supports: No

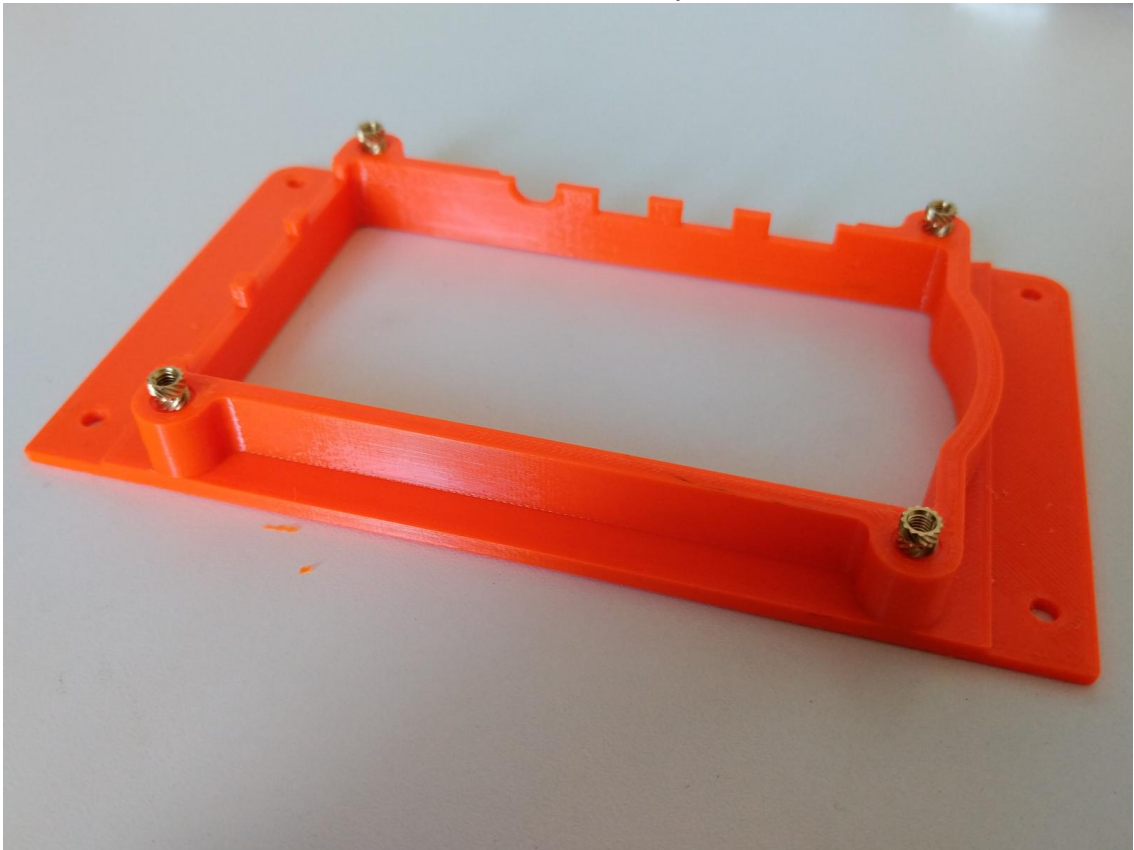
Pi image configuration

In the config.txt the screen orientation must be rotated.

lcd_rotate=2

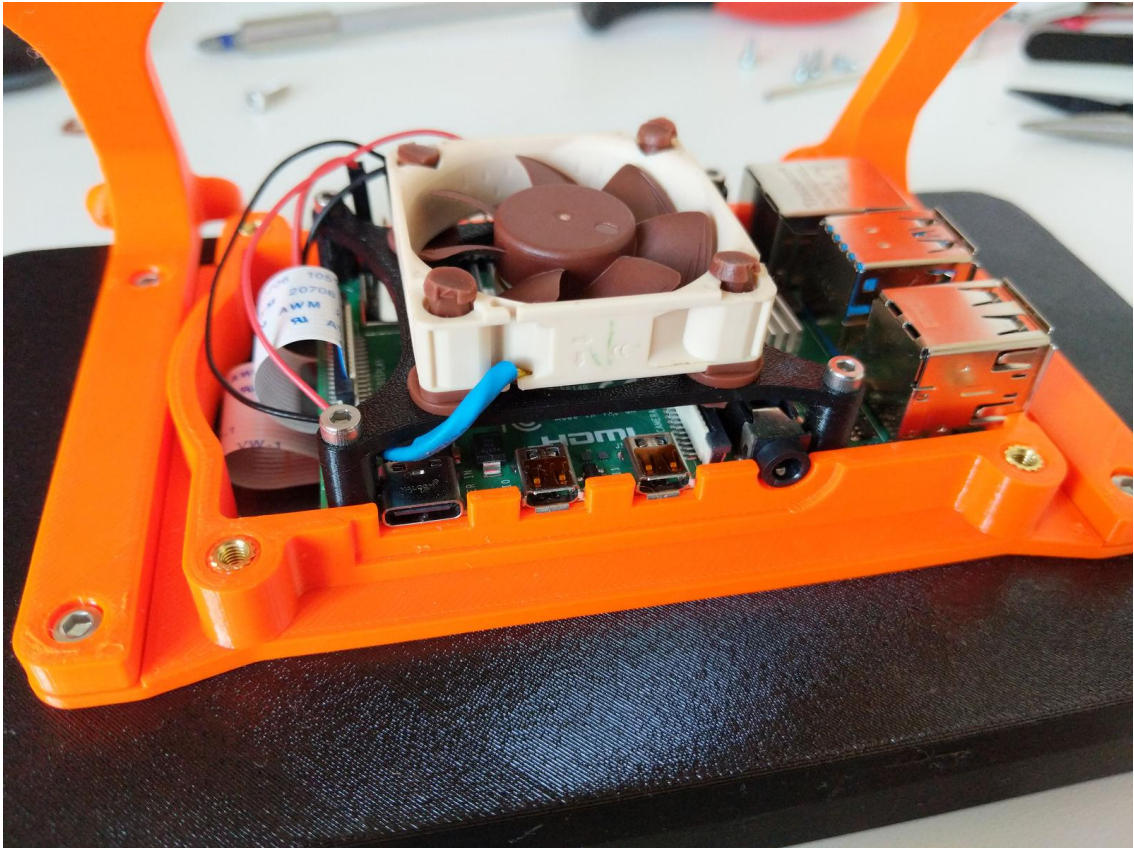
Building instruction

1. Install the threaded inserts in the bottom part of the case.



2. Install the data cable (ribbon cable) and power (red/black wires) with the touch screen controller card. See [Raspberry Pi - Documentation - > Physical Installation](#)
3. Assemble the touch screen, display case, bottom case and strands with M3x12mm screws. **Attention do not tighten the screws yet!**
4. Place the Raspberry in the case. **Do not forget the SD card with image!**
5. Connect the Raspberry with the touch screen.
 - Data cable
 - Red wire (+): 5V power pin e.g. GPIO 2
 - Black wire (-): Ground pin e.g. GPIO 9
6. Install the fan on the fanmount with 4 anti-vibration mounts.

7. Install the fanmount on the Raspberry with M2.5 x 16mm screws. Tighten the screws.



8. Tighten the loose M3 x 12mm screws. (See Point 3)
9. Connect the fan with the Raspberry.
- Red wire (+): 100% fan speed -> 5V power pin e.g. GPIO 4 **or** reduced fan speed -> 3V3 power pin e.g. GPIO 17
 - Black wire (-): Ground pin e.g. GPIO 6
10. Install the top part onto the bottom part using M3 x 12mm screws.

Model files



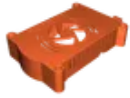
case top v2

3 files



rpi4-case-top_v2.3mf

☐ Additional slot for camera ribbon cable



rpi4-case-top_v2.stl

☐ Additional slot for camera ribbon cable



rpi4-case_asm_v2.stp

☐ Additional slot for camera ribbon cable



cad

1 file



rpi4-case_asm.stp



rpi4-display-case.3mf



rpi4-case-bottom.3mf



rpi4-case-top.3mf



rpi4-stand.3mf



rpi4-fanmount.3mf



rpi4-display-case.stl



rpi4-case-bottom.stl



rpi4-case-top.stl



rpi4-stand-right.stl



rpi4-stand-left.stl



rpi4-fanmount.stl

Print files



rpi4-display-case_02mm_petg_mk3s_4h51m.gcode

⚙ PET ⚙ 0.40 mm ⚙ 0.20 mm ⌚ 4.85 hrs ⚖ 66 g 🖨 Prusa MK3/S/S+



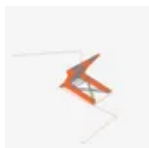
rpi4-case-bottom_02mm_petg_mk3s_2h6m.gcode

⚙ PET ⚙ 0.40 mm ⚙ 0.20 mm ⌚ 2.10 hrs ⚖ 27 g 🖨 Prusa MK3/S/S+



rpi4-case-top_02mm_petg_mk3s_4h2m.gcode

⚙ PET ⚙ 0.40 mm ⚙ 0.20 mm ⌚ 4.03 hrs ⚖ 40 g 🖨 Prusa MK3/S/S+



rpi4-stand_02mm_petg_mk3s_2h51m.gcode

🌀 PET 📏 0.40 mm 📏 0.20 mm ⌚ 2.85 hrs ⚖️ 21 g 🖨️ Prusa MK3/S/S+



rpi4-fanmount_02mm_petg_mk3s_29m.gcode

🌀 PET 📏 0.40 mm 📏 0.20 mm ⌚ 0.49 hrs ⚖️ 3 g 🖨️ Prusa MK3/S/S+



rpi4-case-top_v2_02mm_petg_mk3s_4h7m.gcode

🌀 PET 📏 0.40 mm 📏 0.20 mm ⌚ 4.12 hrs ⚖️ 37 g 🖨️ Prusa MK3/S/S+

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