



How to install the Raspberry Pi in a control cabinet

by [harty123](#) on March 27, 2014

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Intro: How to install the Raspberry Pi in a control cabinet

Now that you've finally got your hands on a Raspberry Pi®, you're probably itching to make some fun embedded computer projects with it. What you need is an add on prototyping plate and a DIN rail enclosure from us to bring your project to a control cabinet. We added some basic but essential goodies. First up, there's a big prototyping area, half of which is for THT parts and half of which is for SMD parts so you can wire up DIP chips, relays, and the like. Along the edges of the proto area, all the GPIO/I2C/SPI and power pins are connected and marked. You can connect your work via terminals with the world outside the enclosure. Here are the main features of our **RasPiBox DIY kit**:

- milled cab rail enclosure (high quality - made in Germany)
- for EN50022 DIN rails
- prototyping plate - fits perfectly in the enclosure
- 2x 2-pin terminal blocks
- 2x 3-pin terminal blocks
- SSOP and SOIC breakout area for integrated circuits
- 0805 and SOT23 breakout area for other SMD parts



Step 1: Tools and materials

Check that you have all the parts in the RasPiBox DIY kit - the PCB, a 2x13 female header, two 3-pin terminal blocks, two 2-pin terminal blocks, 2 self-taping screws, the milled enclosure

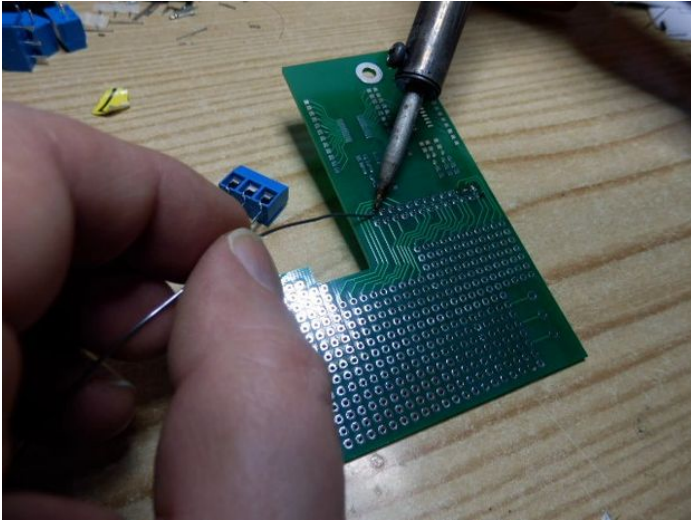
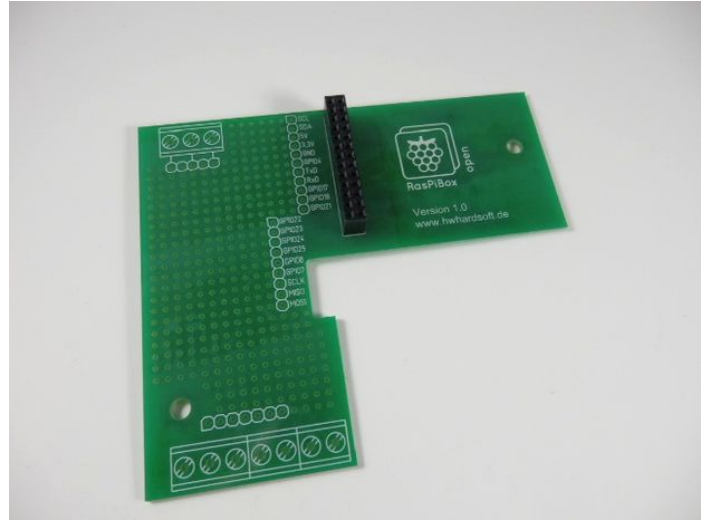
You will also need a soldering iron, solder and a screwdriver for recessed head screws to assemble the kit



Step 2: Solder the 2x13 female header

Place the proto plate PCB on so that the 2x13 header pins poke out through the matching 2x13 pads in the corner.

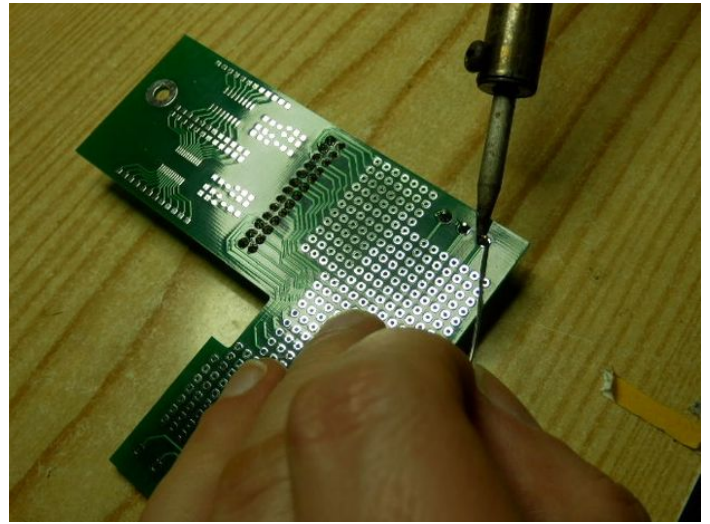
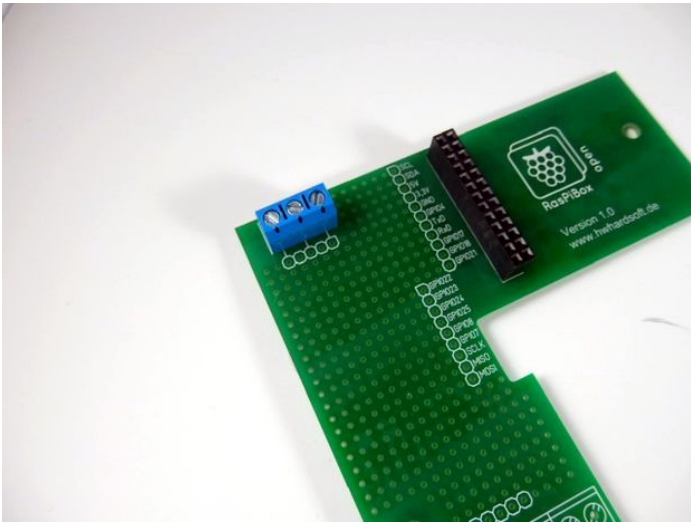
Start by soldering the two corner pins. This will allow you to make sure the plate is aligned properly and fix it if its crooked. Continue to solder all 26 pins!



Step 3: Assemble the terminal blocks

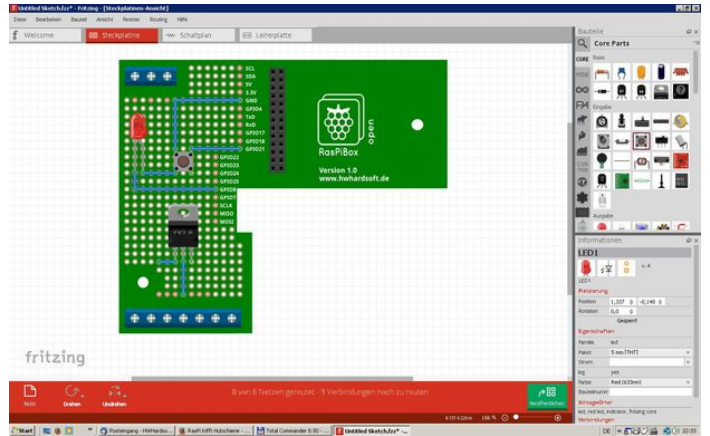
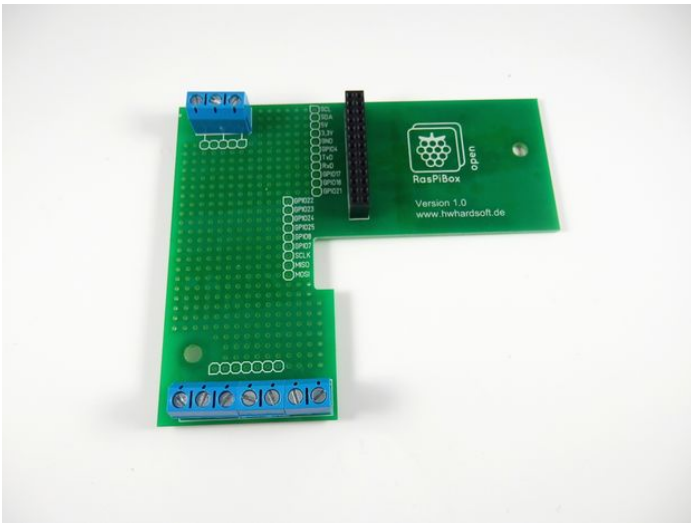
Find the terminal blocks, they're blue and come in 3-pin and 2-pin shapes. We'll need to slide two 2-pin and one 3-pin blocks together for the next step where we put the blocks into the proto plate.

Place the blue terminal blocks around the perimeter of the Proto Plate PCB. Make sure you place them so that the open ends are facing out as shown.



Step 4: Realize your idea

All parts from the diy kit are assembled. It's time now to realise your own idea in the breakout areas! We recommend the open-source electronic design automation (EDA) tool Fritzing (www.fritzing.org) to plan your own circuit in the breadboard area. We provide an own RasPiBox part for fritzing on our website.



Step 5: Mount the pcb

Use the two self-tapping screws to mount the pcb into the lower part of the enclosure.

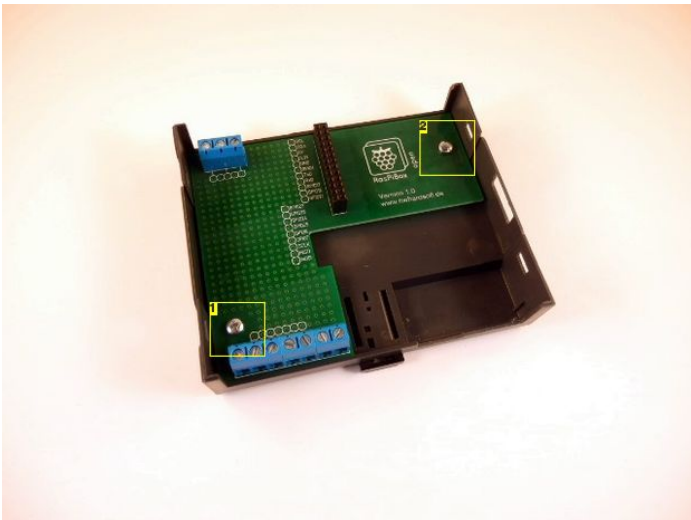


Image Notes

1. self-tapping screw

<http://www.instructables.com/id/How-to-install-the-Raspberry-Pi-to-a-cap-rail/>

2. self-tapping screw

Step 6: Mount the Raspberry Pi

Place the Raspberry Pi onto the 2x13 female header.



Step 7: Close the enclosure

click the upper enclosure part onto the lower part.

Now you be able to put your project to a cab rail in a control cabinet.



Step 8: Install it!

Put your RasbiBox into a control cabinet

