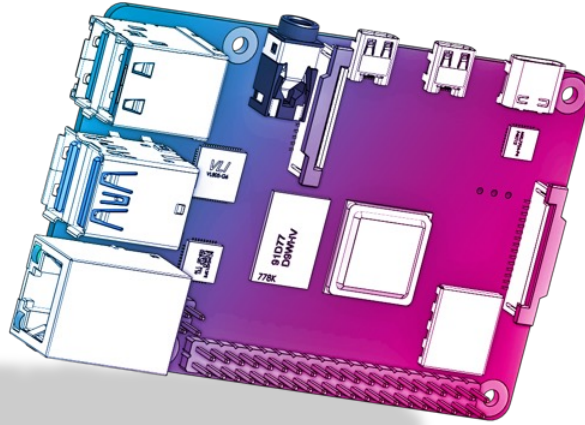




How to build your robot

www.pib.rocks/build

instructions for:
START UP
v2024



PRINT

BUILD

DEVELOP

YOUR OWN ROBOT

Build it better: our suggestion for assembling pib



We recommend **tools** for each step. These are a suggestion, you can of course also use other tools.



1-5

We have categorized each step according to its **difficulty** - from **1-5** (1 being the easiest, 5 the hardest)

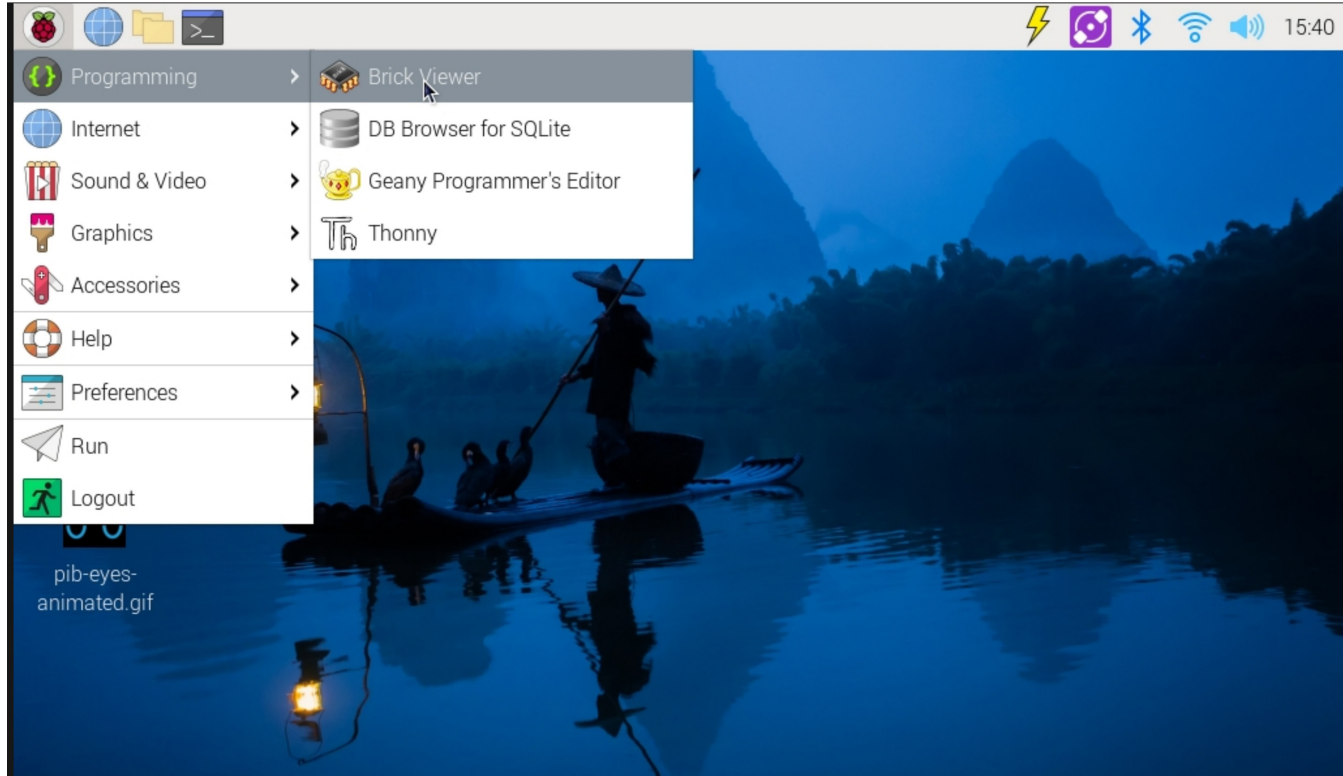


We also show you which **non-printable parts** you need for each step

Step 1

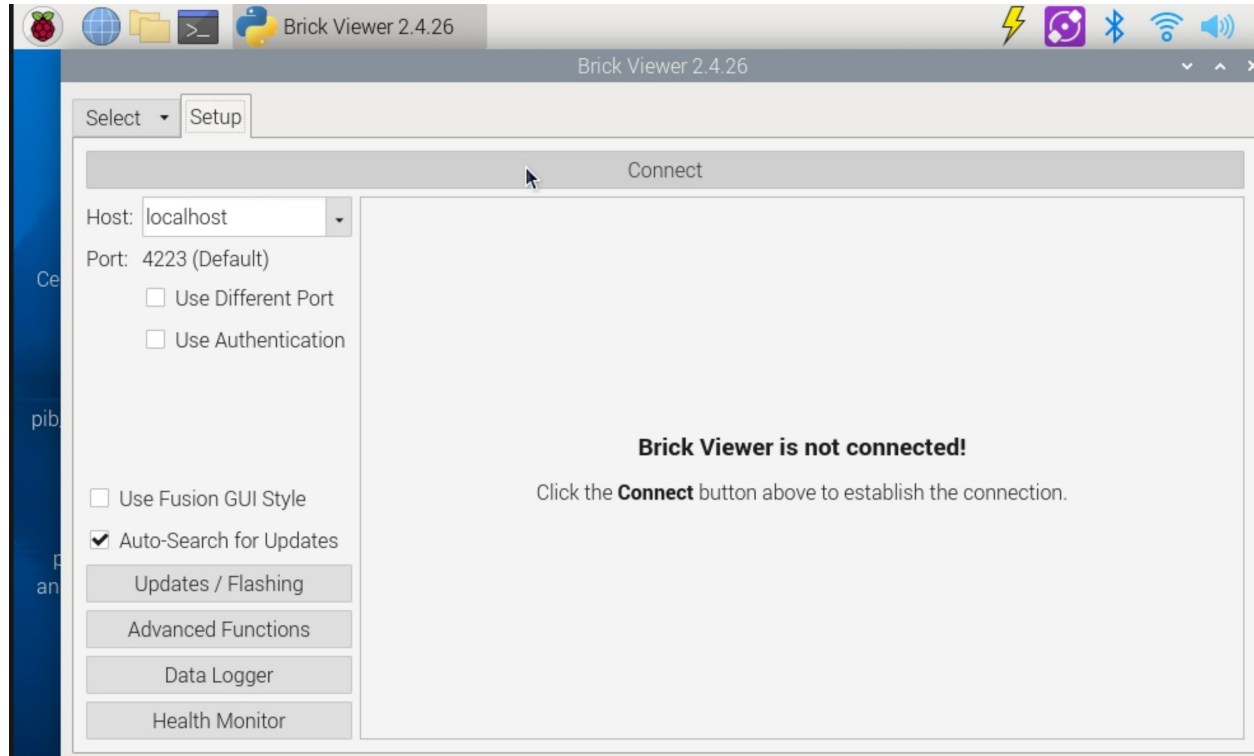


Click on the top left Raspberry icon, then point at programming and select brick viewer



Step 2a

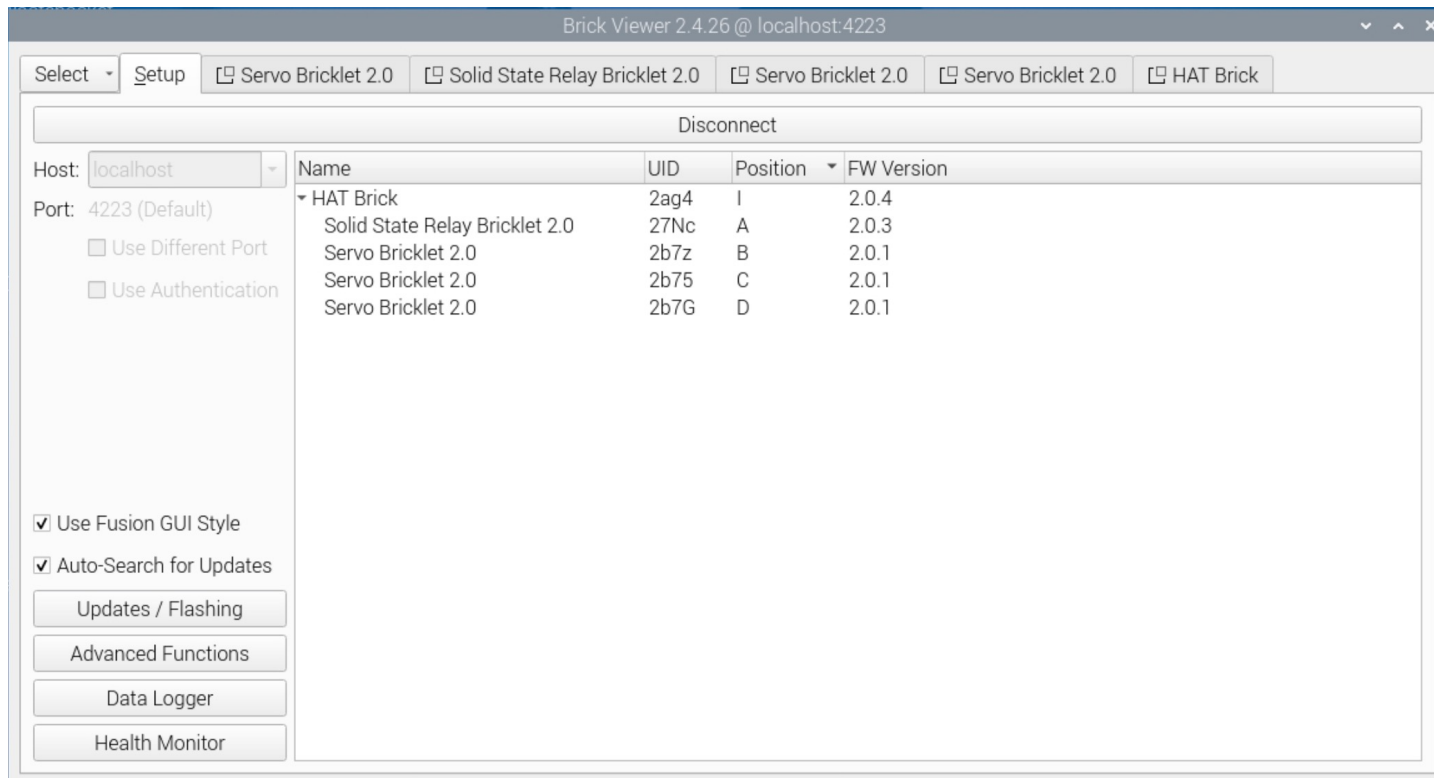
Click on connect



This connects all connected tinkertforge icoomponents (1x Relay Bricklet, 3x Servo Bricklet) to the brick viewer software

note

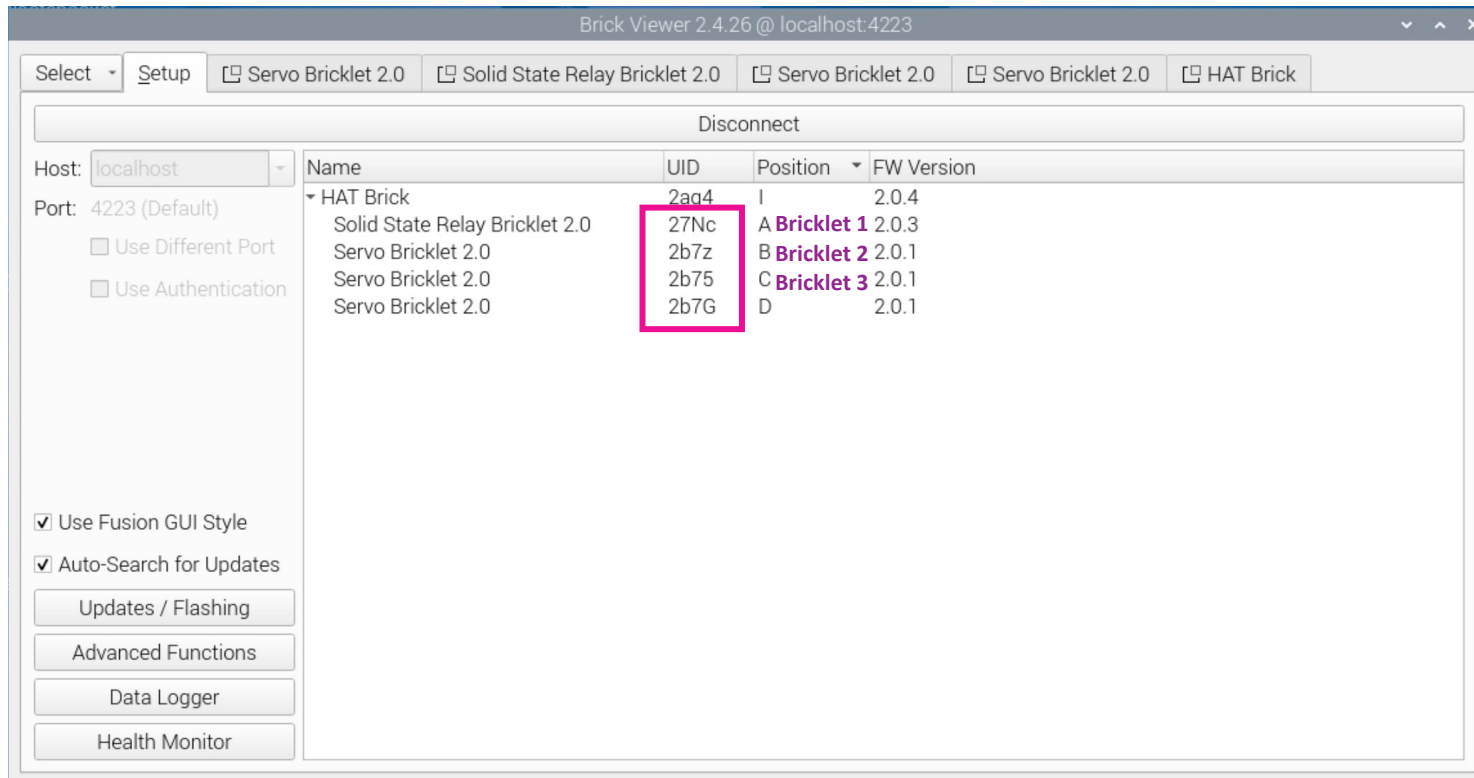
- I. relay bricklet is for controlling the power supply
- II. servo bricklets are for controlling the motors



Step 2b



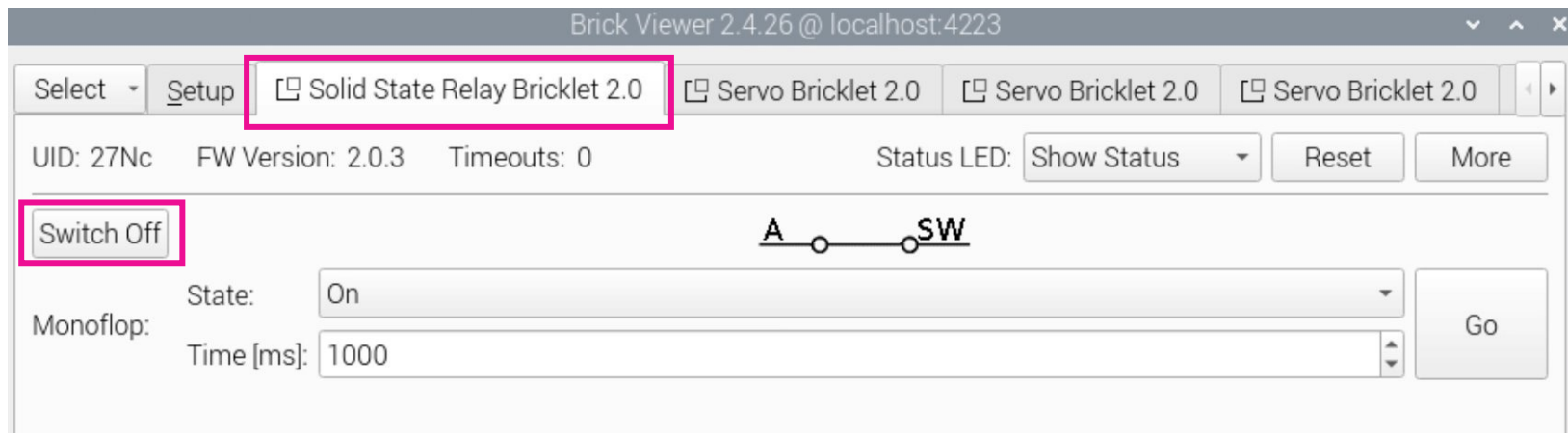
Write the UUIDs beside each bricklet in a piece of paper (case sensitive), but make sure you connected bricklet cables to correct ports as the picture



Step 3



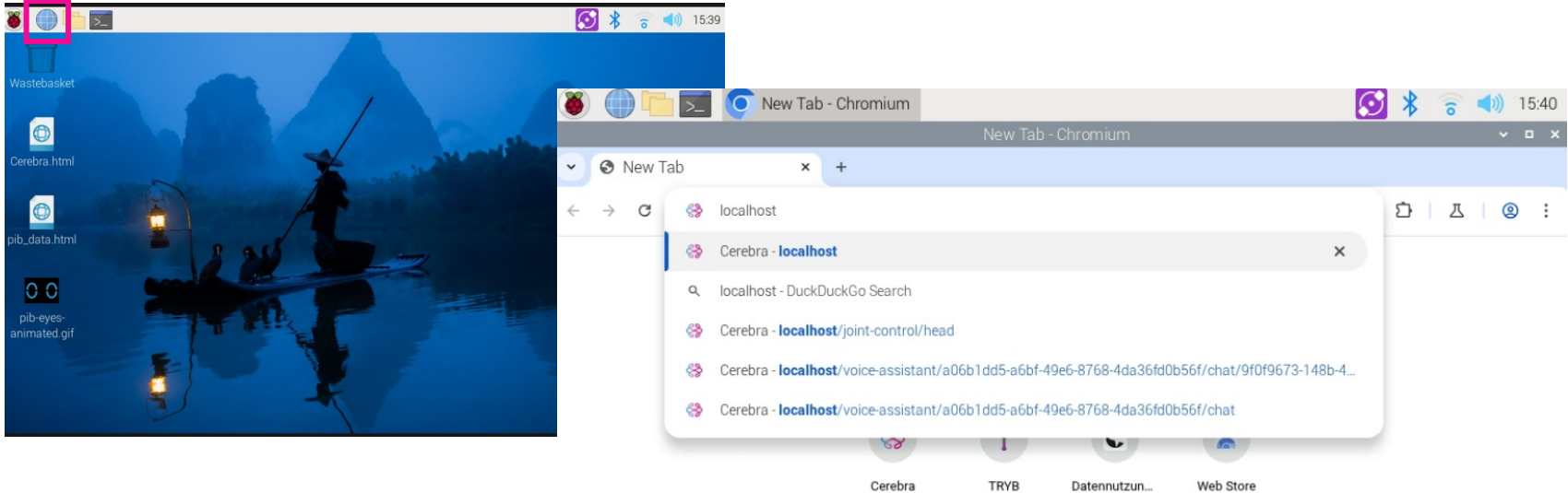
To turn on and off the power for motors click on the shown button in solid state relay bricklet tab



Step 4a



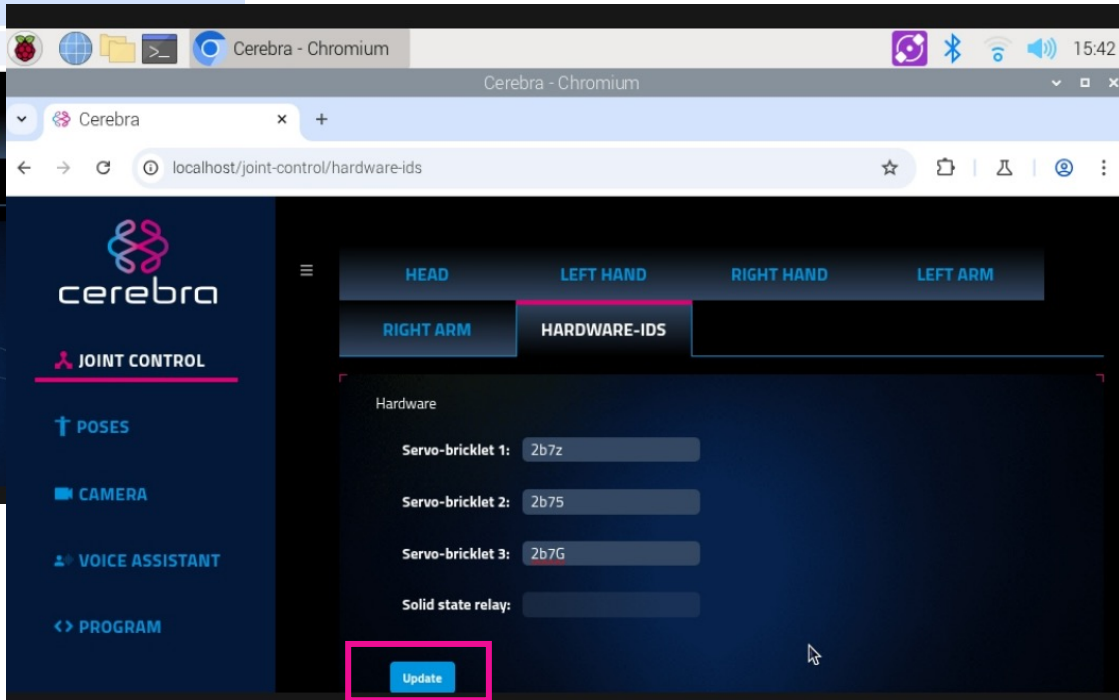
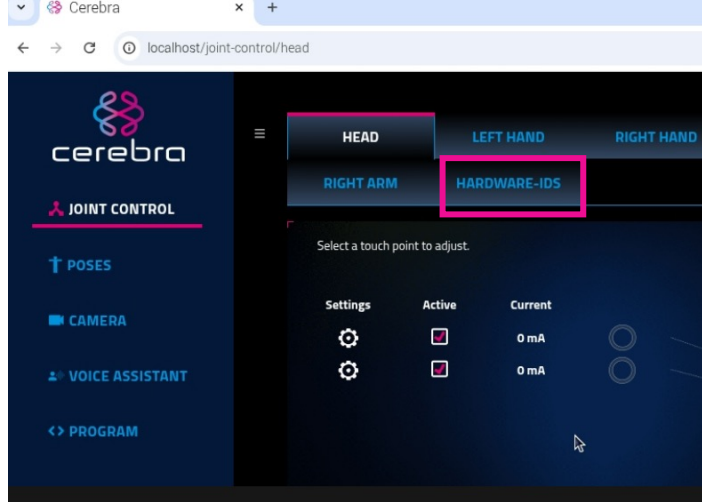
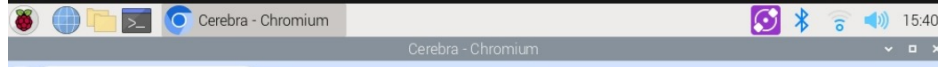
Open a new browser window and navigate to localhost



Step 4b



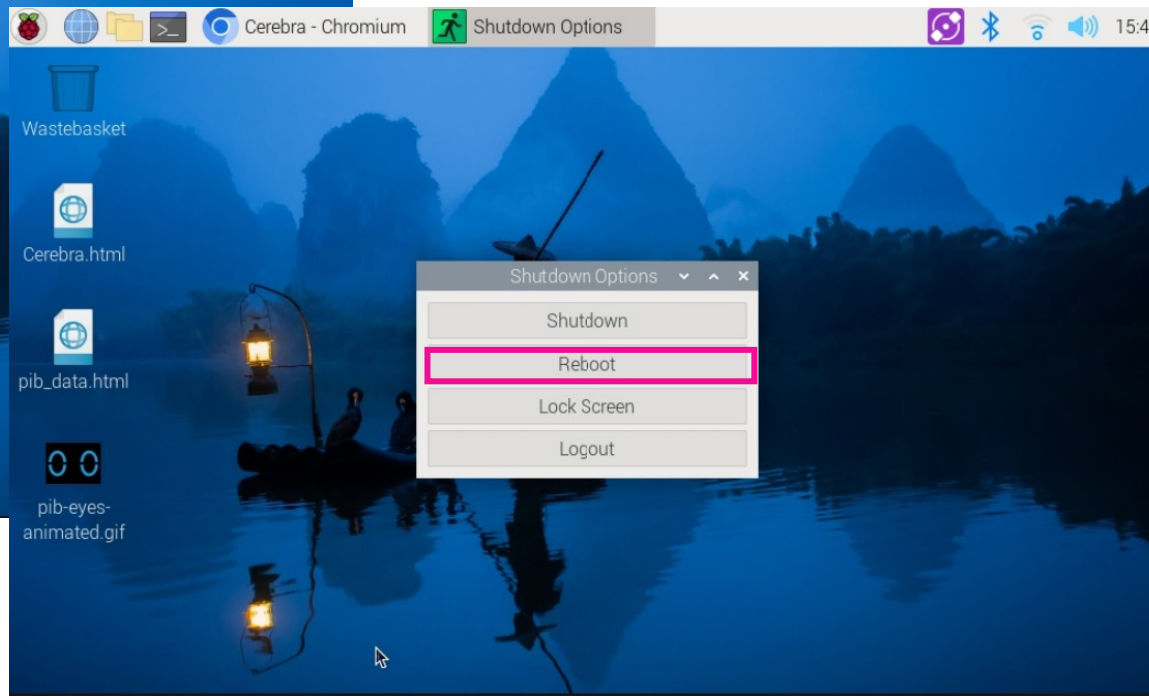
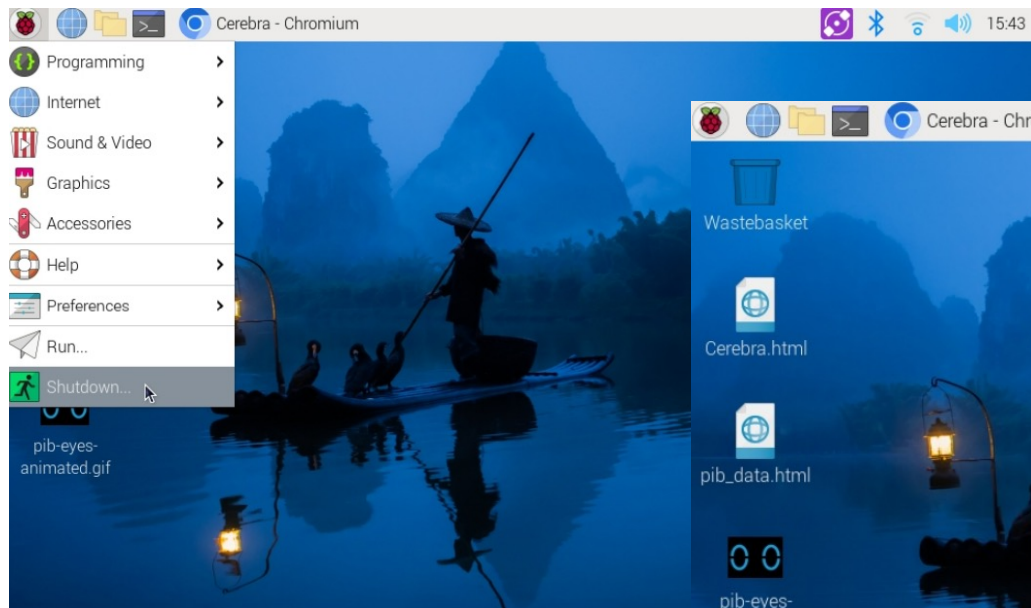
Click on bricklet UUIDs and enter the UUIDs we gathered in step 2b and click on update



Step 4c

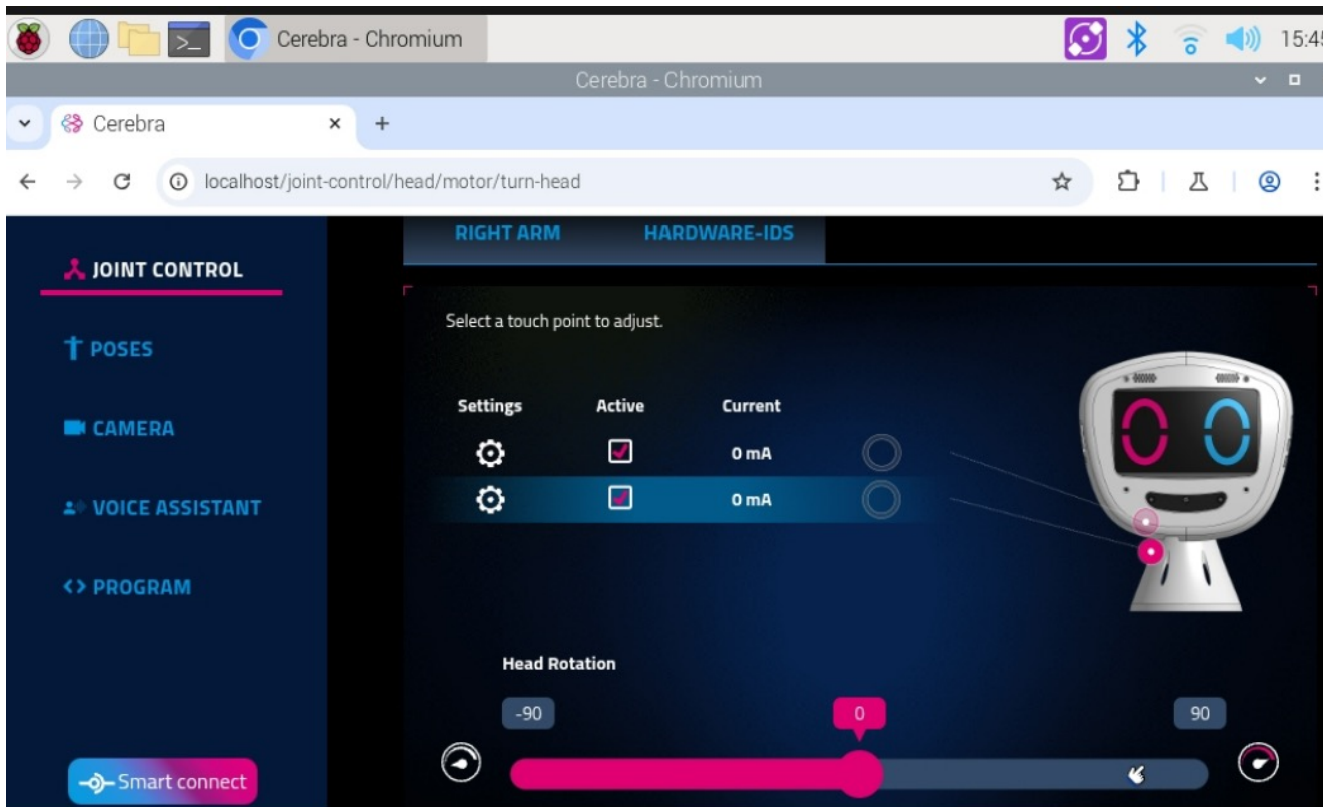


Restart pib



Feature 1

Click on joint control and select any joint you want to move and just move the slider



Note



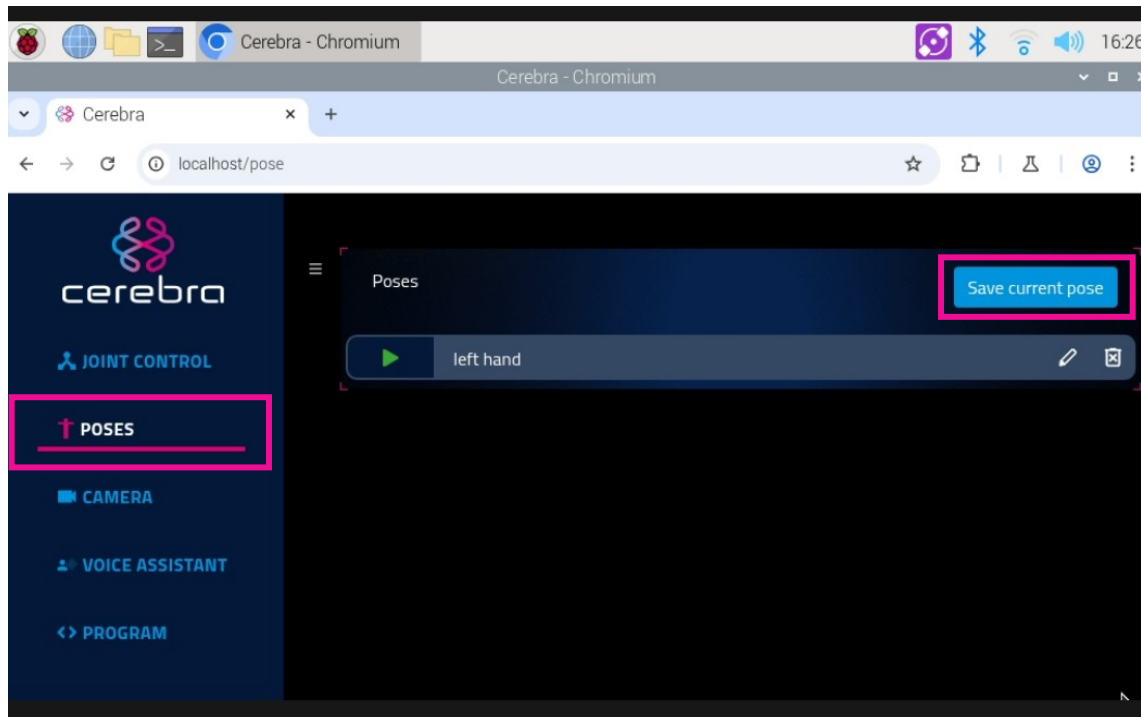
If a finger moves in the opposite direction to others, click on the finger, click on settings icon, click on extended values and click invert

The screenshots illustrate the process of inverting a motor in the Cerebra web interface:

- Initial View:** The 'RIGHT HAND' tab is selected. A settings icon (gear) is highlighted on the right hand diagram.
- MOTOR SETTINGS:** The 'EXTENDED VALUES' tab is selected. The 'Pulse width (μs)' is set to 750.0 and the 'Degree (°/100)' is set to -90°.
- Invert Motor:** The 'Invert motor' checkbox is checked.

Feature 2

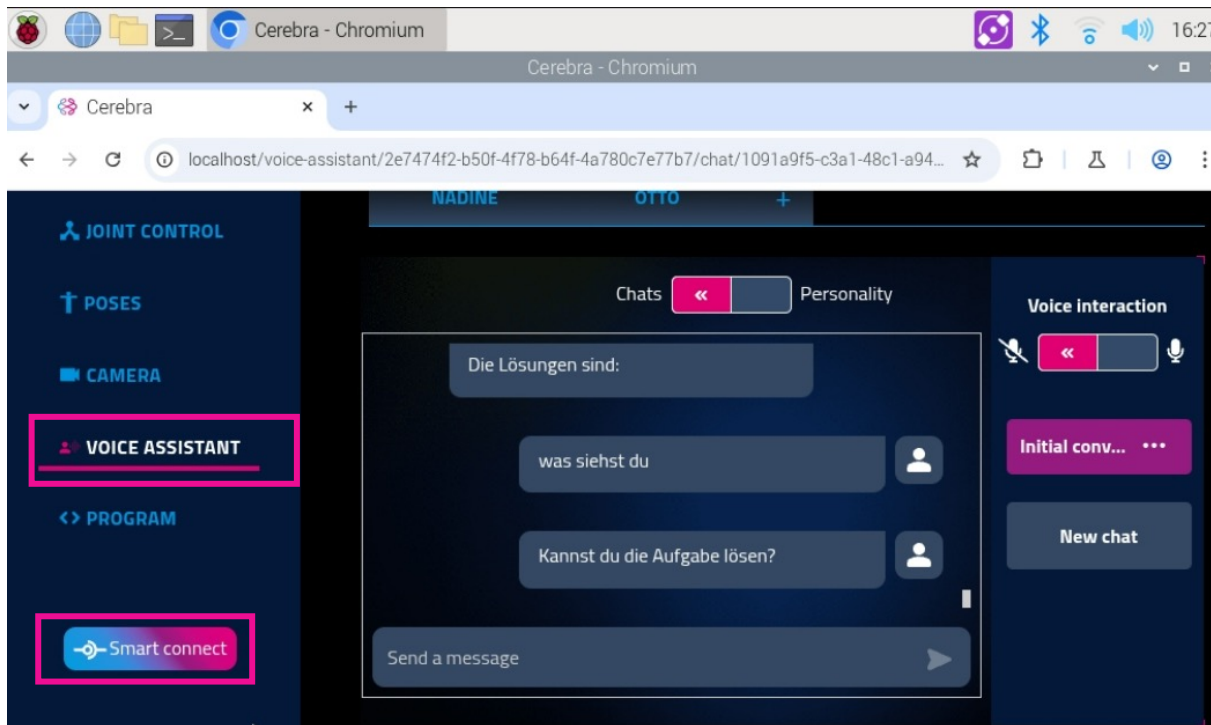
Move the joints with joint control to a configuration you want to save, then navigat to poses and create new pose. Now every time you click on this pose, pib will go to the saved configuration



Feature 3



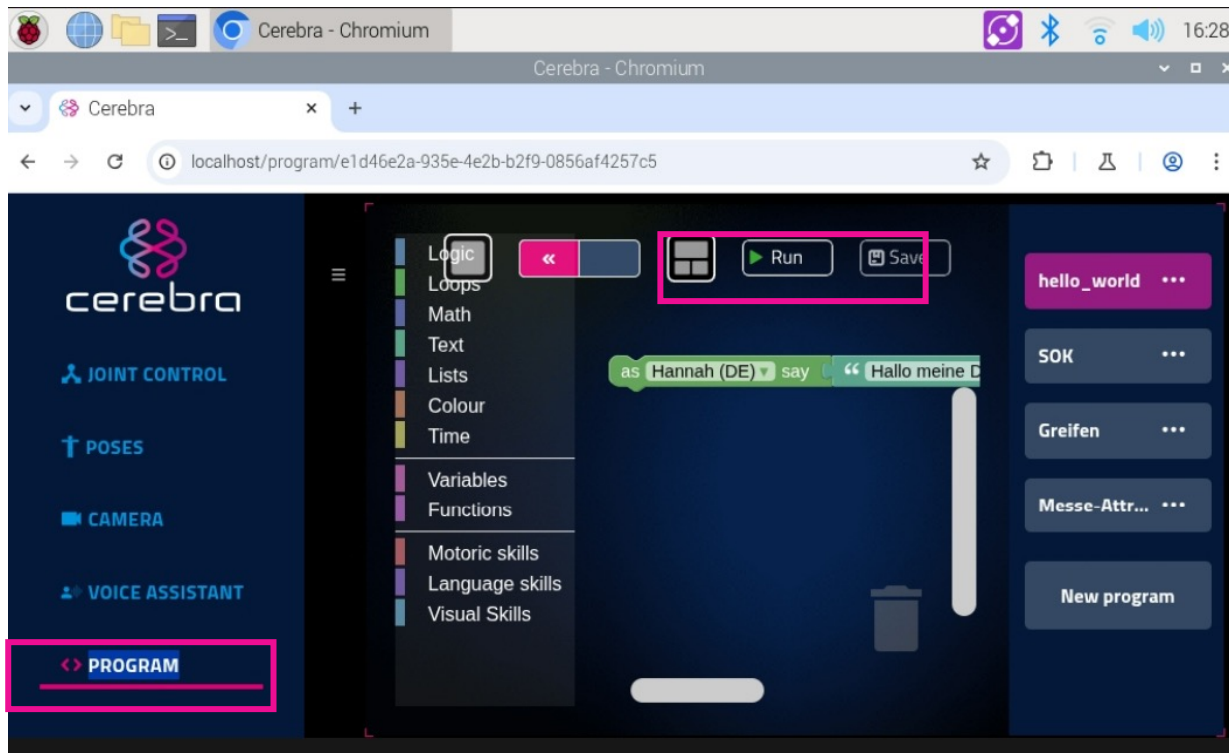
Click on smart connect API, get in touch with pib team at team@pib.rocks to provide you with a token, enter this token, a new password and start talking with pib



Feature 4

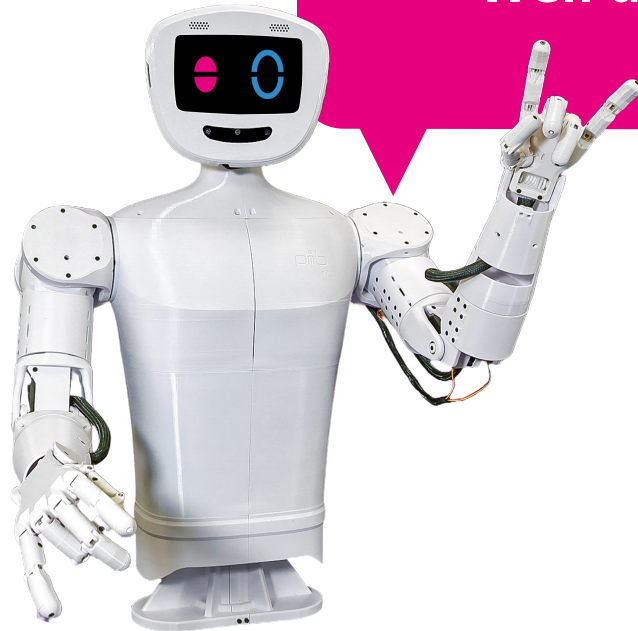


Click on block programming to create a script with basic blocks, then click run to start it



Congratulations

You did a great job, you have started pib!



Well done!

Do you need support?

Or do you need our pib.Box with all non-printable parts?

Or maybe you have some new ideas and improvements?

Please contact us.



team@pib.rocks

Send us an email.



discord.com/invite/GRdpyeDu7P

Join us on Discord.



shop.pib.rocks

Order non-printable parts for pib.