



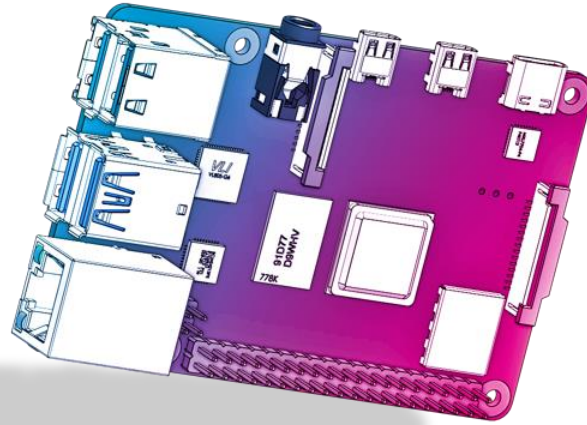
How to build your robot

www.pib.rocks/build

instructions for:

Start Up

pib#4



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

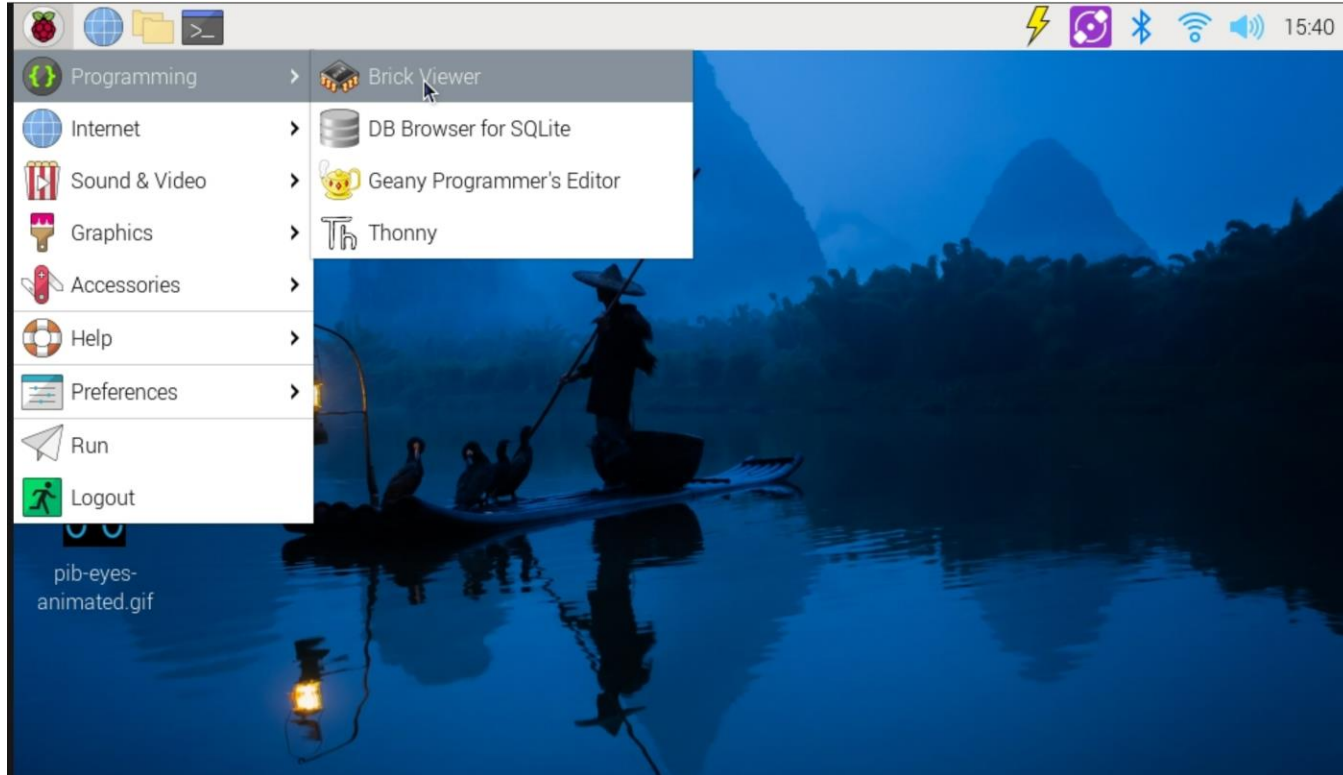
We have categorized each step according to its **difficulty** - from **1-5** (1 being the easiest, 5 the hardest)



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

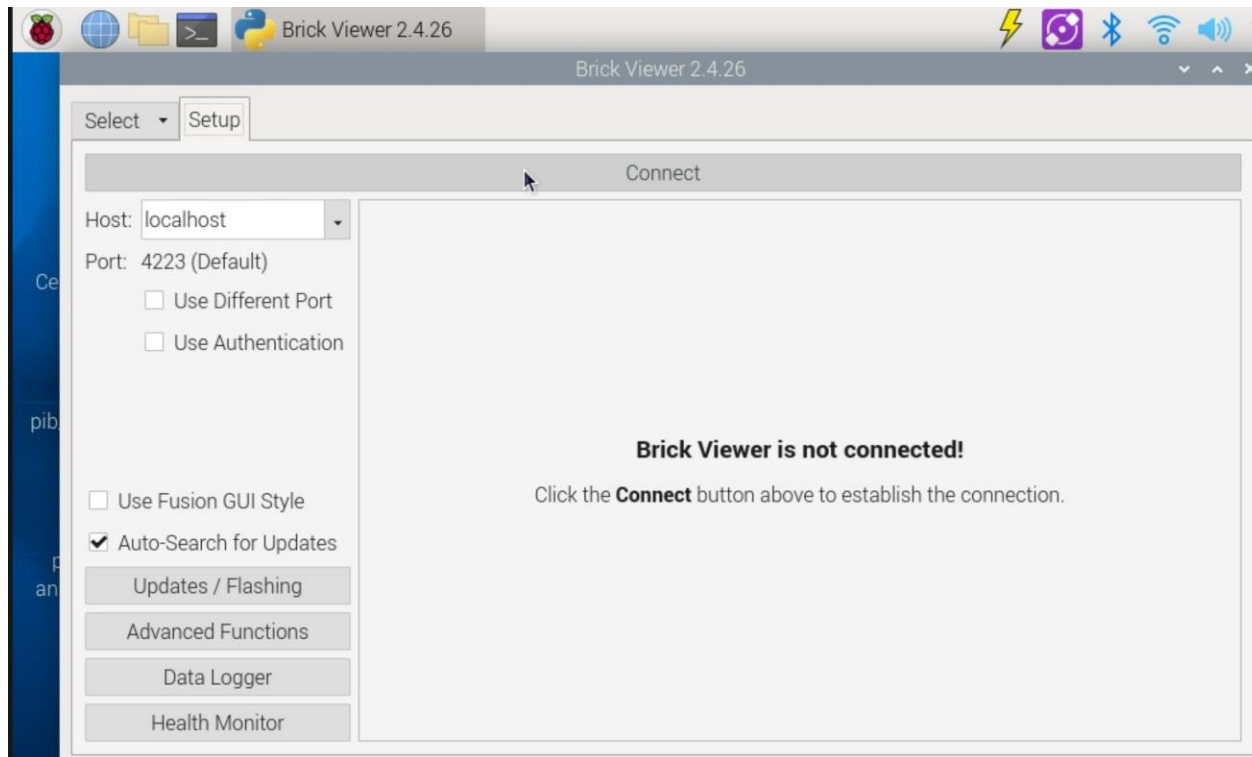
Step 1

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



Step 2a

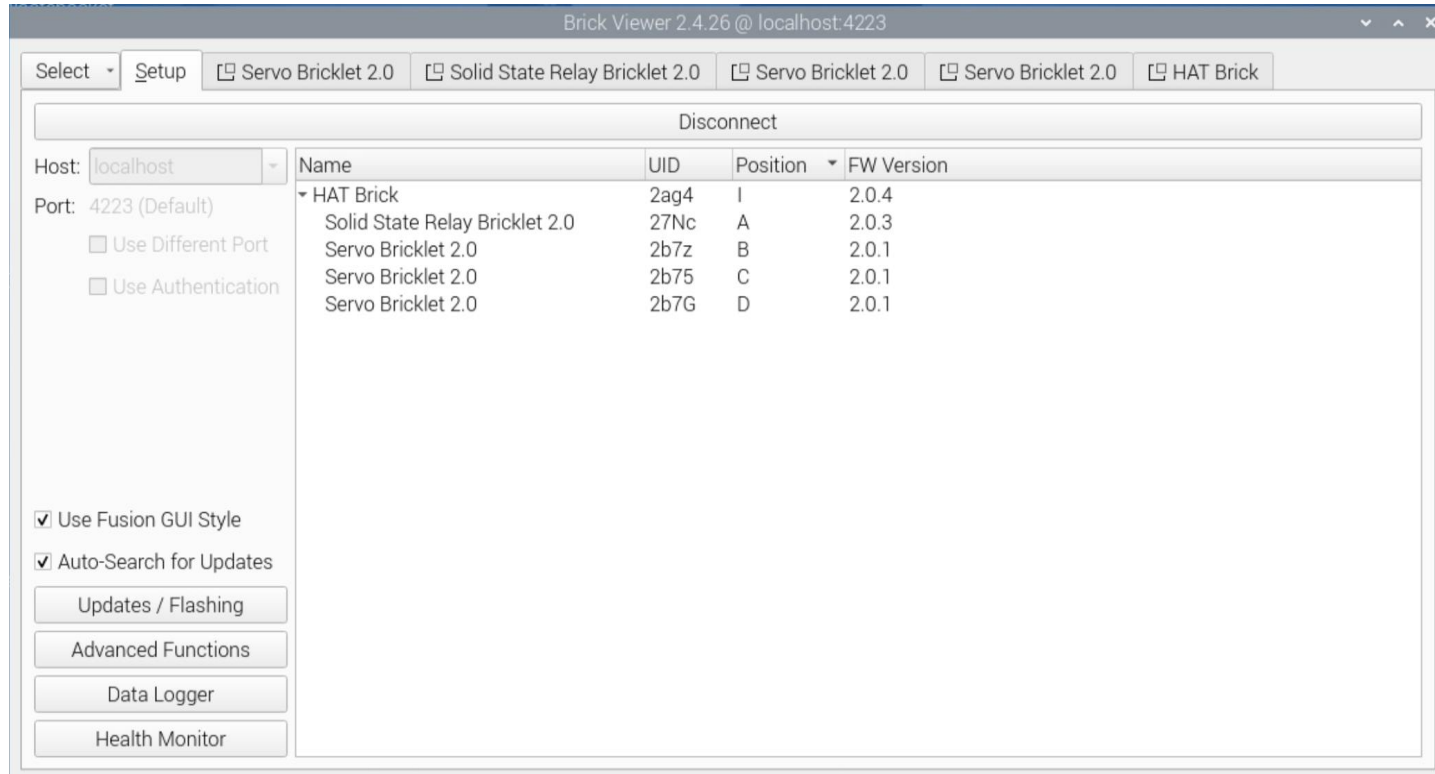
Click on connect



This connects all connected tinkertforge icomponents (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

Brick Viewer 2.4.26 @ localhost:4223

Select Setup ☐ Servo Bricklet 2.0 ☐ Solid State Relay Bricklet 2.0 ☐ Servo Bricklet 2.0 ☐ Servo Bricklet 2.0 ☐ HAT Brick

Host: localhost Port: 4223 (Default)

☐ Use Different Port ☐ Use Authentication

☒ Use Fusion GUI Style ☒ Auto-Search for Updates

Updates / Flashing

Advanced Functions

Data Logger

Health Monitor

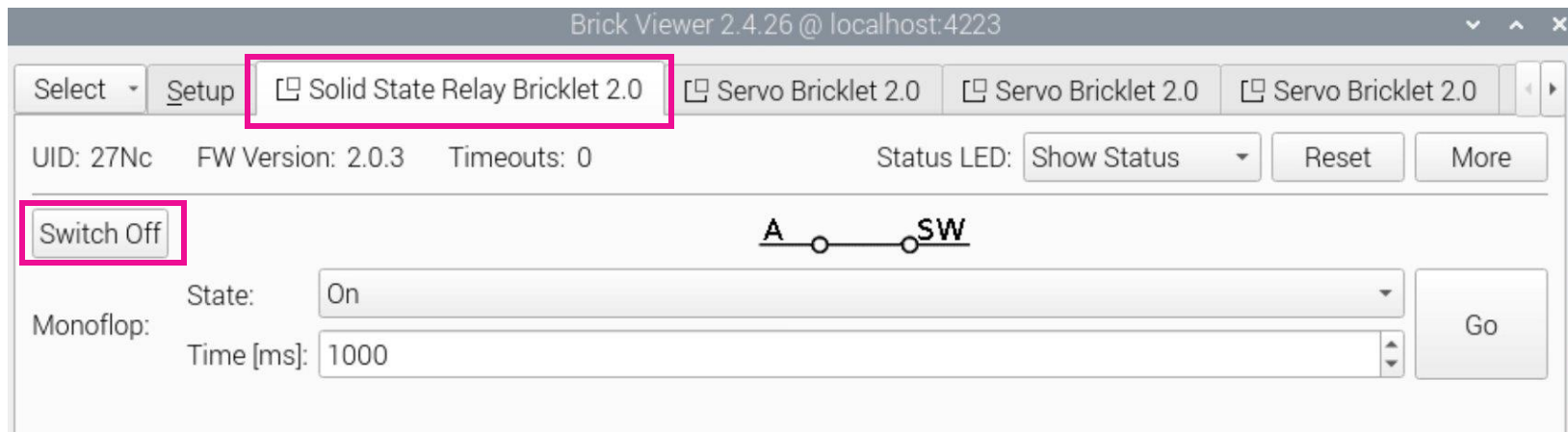
Disconnect

Name	UID	Position	FW Version
▼ HAT Brick	2a94	I	2.0.4
Solid State Relay Bricklet 2.0	27Nc	A Bricklet 1	2.0.3
Servo Bricklet 2.0	2b7z	B Bricklet 2	2.0.1
Servo Bricklet 2.0	2b75	C Bricklet 3	2.0.1
Servo Bricklet 2.0	2b7G	D	2.0.1

Step 3



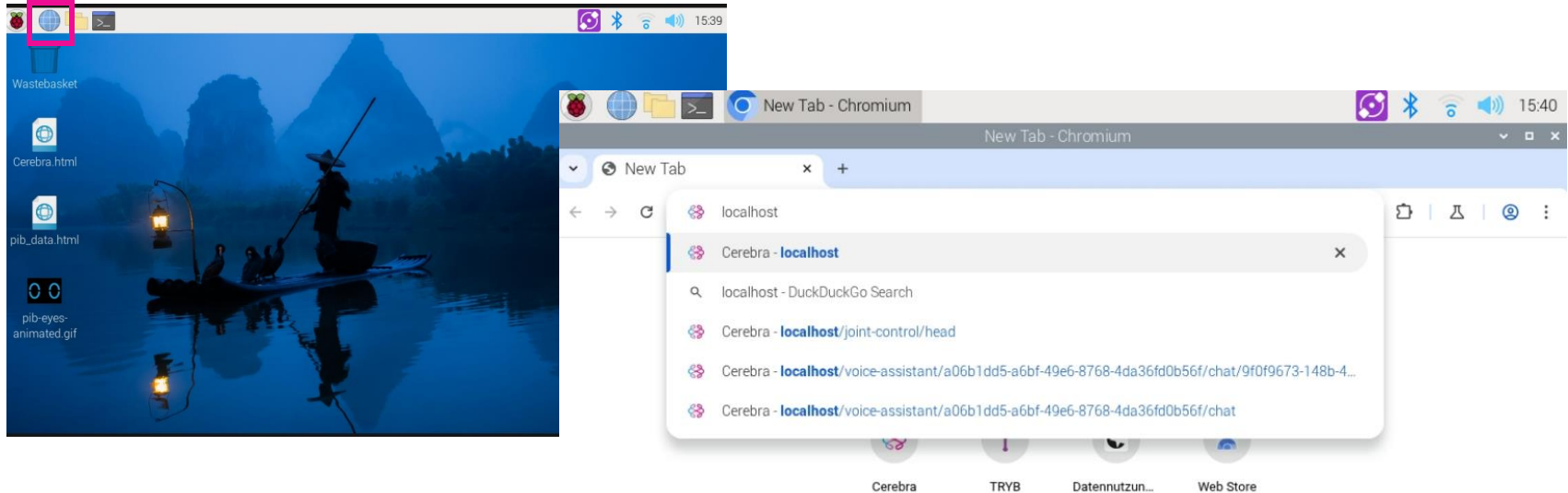
To turn on and off the power for motors click on the shown button in solid state relay bricklet tab



Step 4a



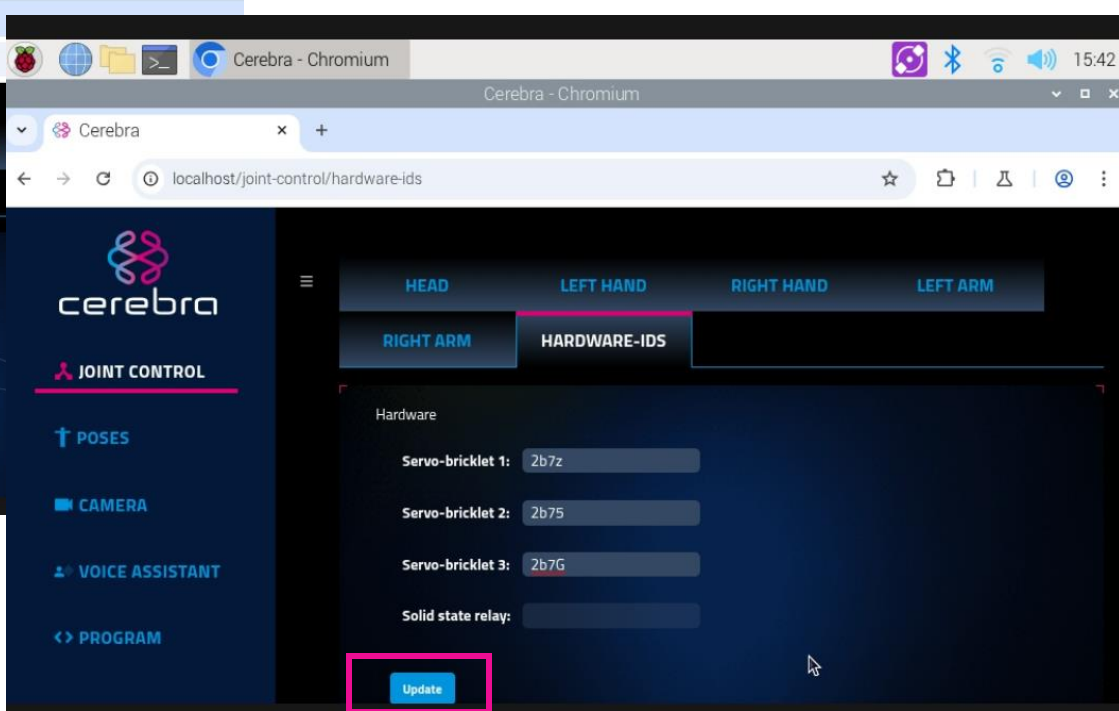
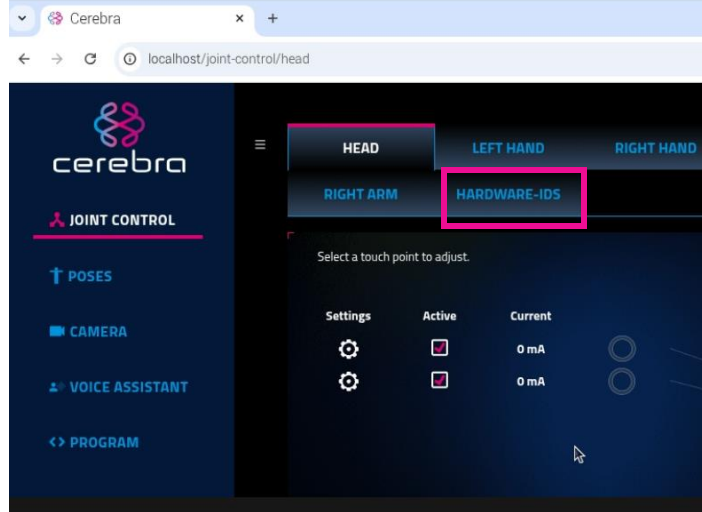
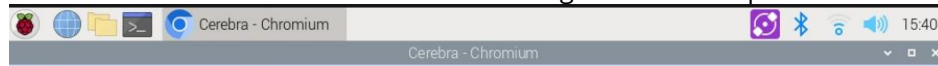
Open a new browser window and navigate to localhost



Step 4b



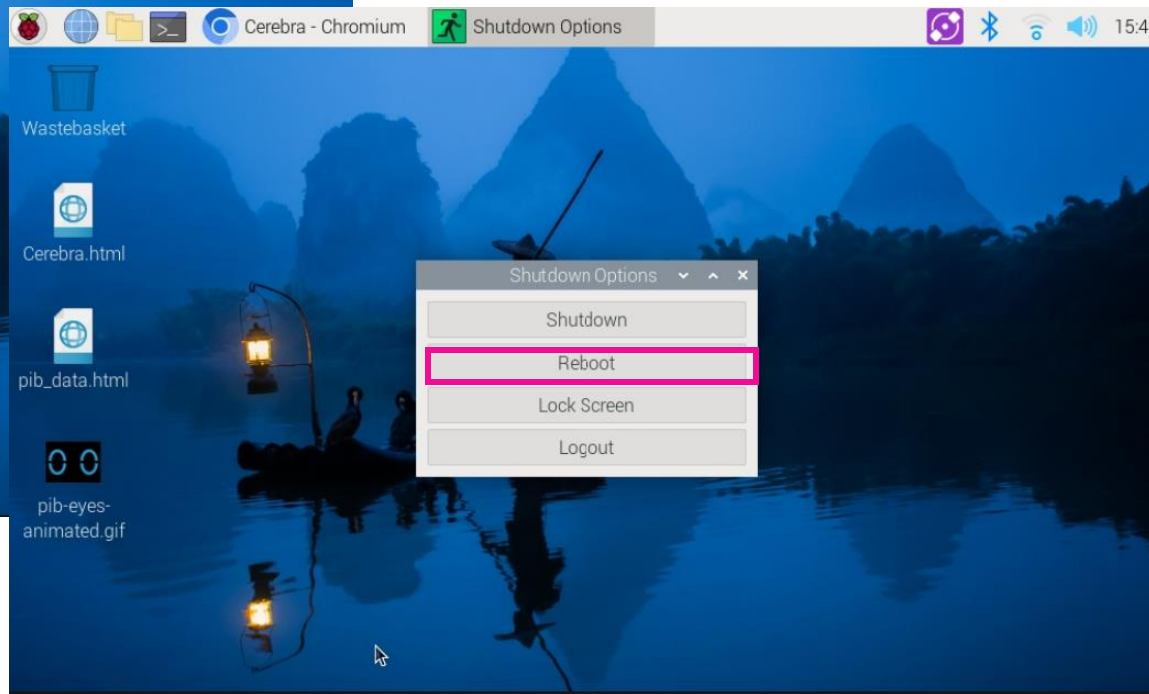
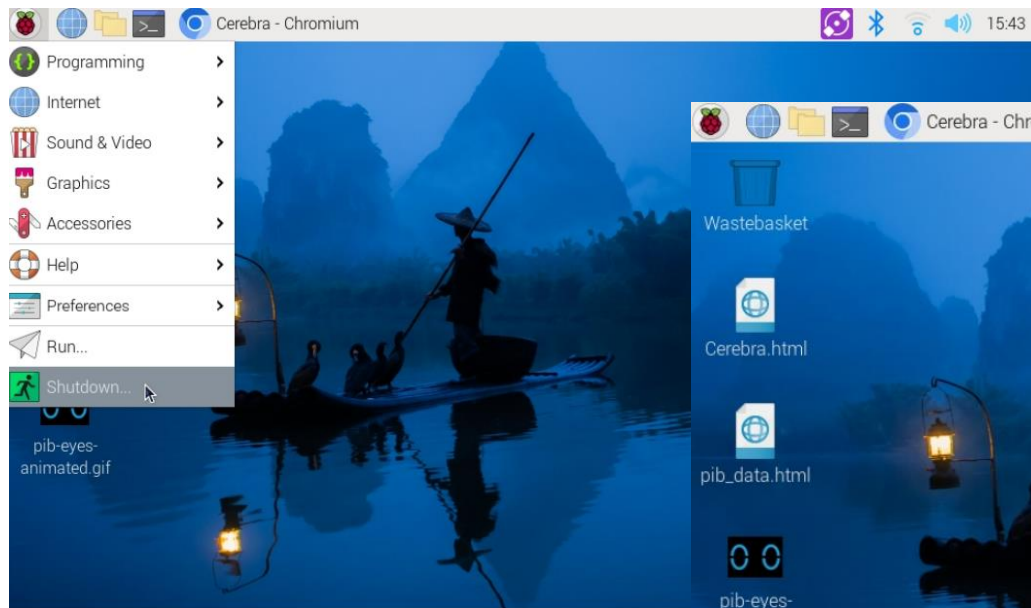
Click on bricklet UUIDs and enter the UUIDs we gathered in step 2b and click on update



Step 4c

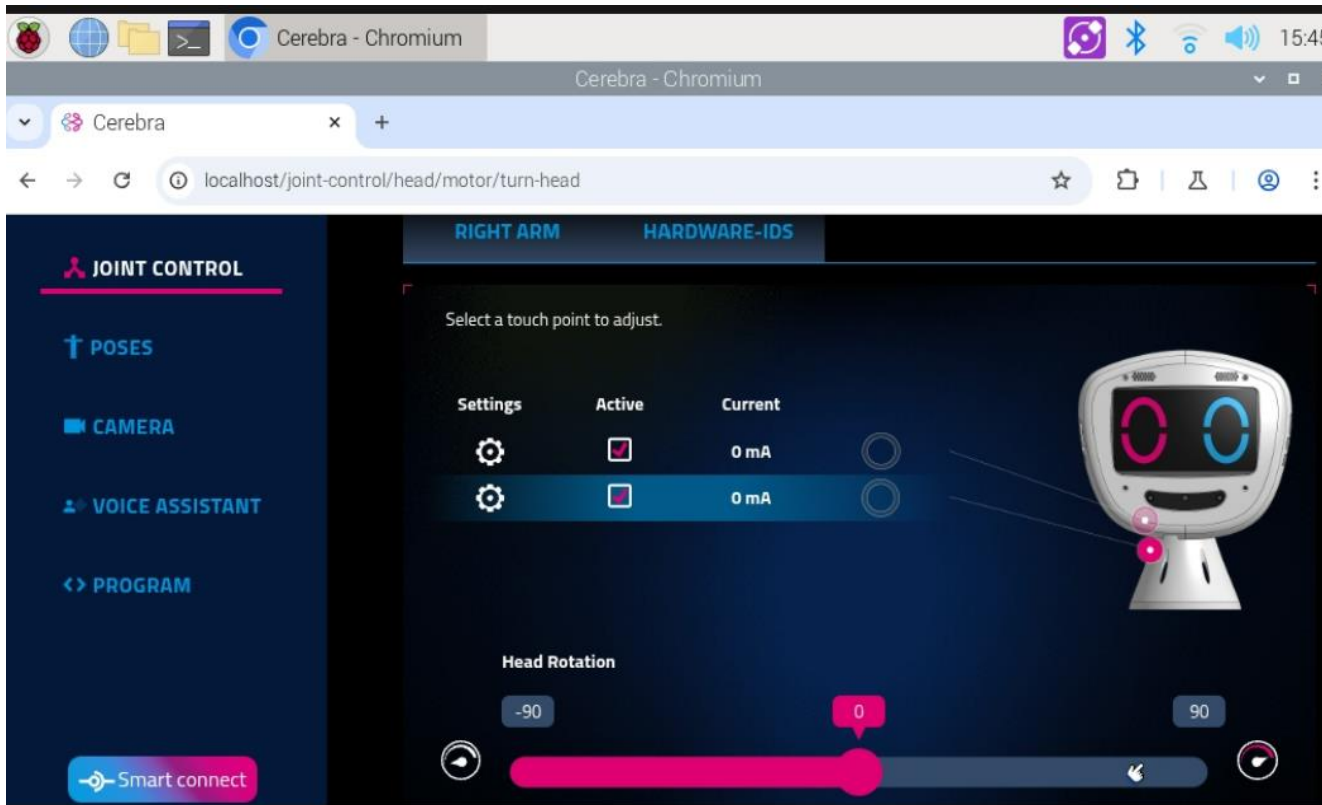


Restart pib



Feature 1

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



Note



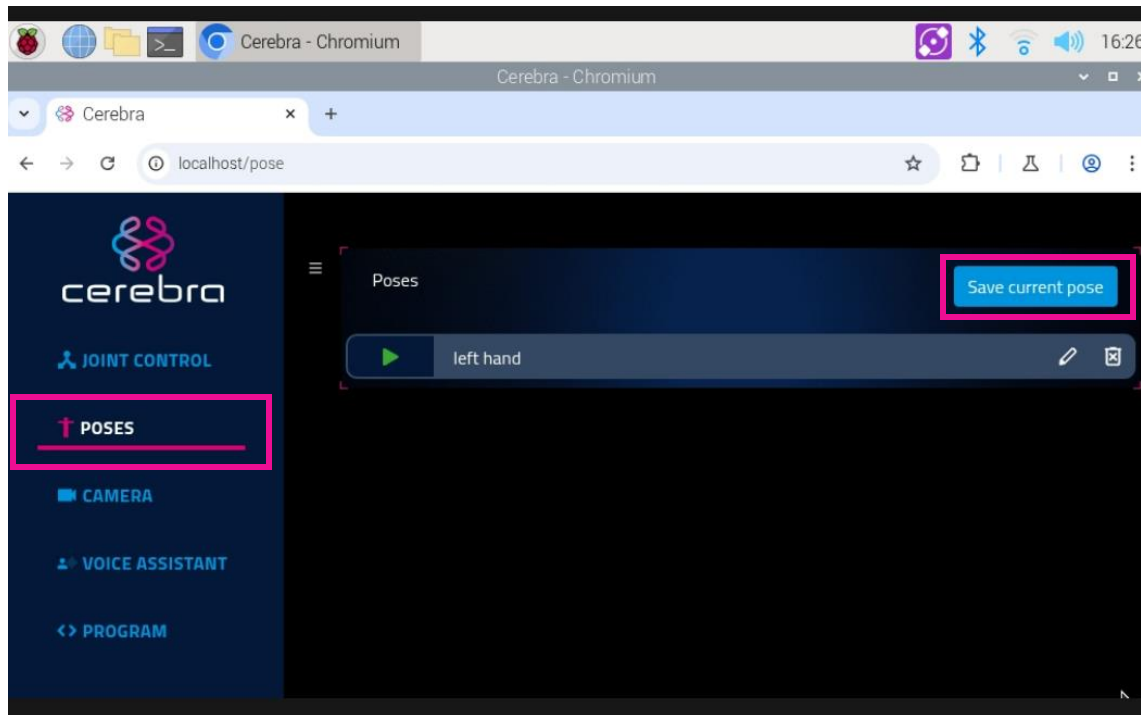
If a finger moves in the opposite direction to others, click on the finger, click on settings icon, click on extended values and click invert

The screenshots illustrate the following steps:

- Main Menu:** The 'RIGHT HAND' tab is selected. A gear icon in the 'Settings' column is highlighted with a red box.
- MOTOR SETTINGS:** The 'EXTENDED VALUES' tab is selected within the 'MOTOR SETTINGS' dialog.
- Slider Adjustment:** The 'Degree (°/100)' slider for a specific finger is shown, with the value set to -90°.
- Invert Motor:** The 'Invert motor' checkbox is checked, indicated by a red box.

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



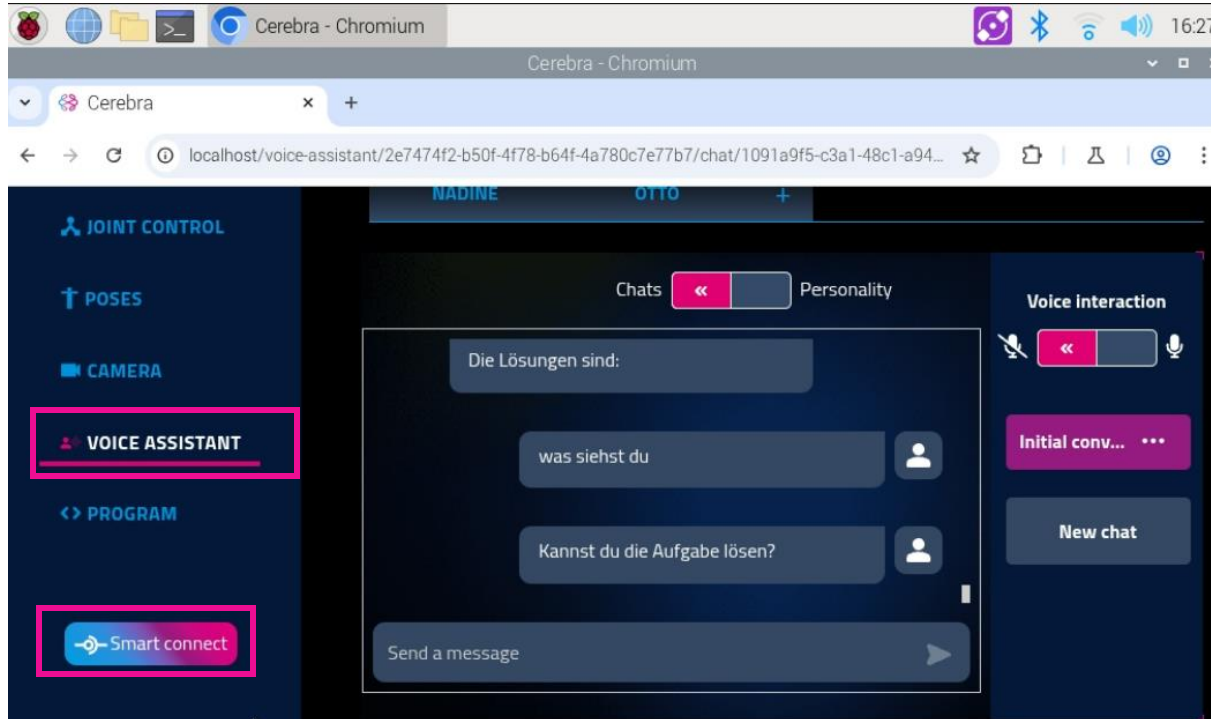
Feature 3



Click on smart connect API.

You can generate your token via our AI platform TRYB. Here are the different subscription plans: <https://www.tryb.ai/pricing/>

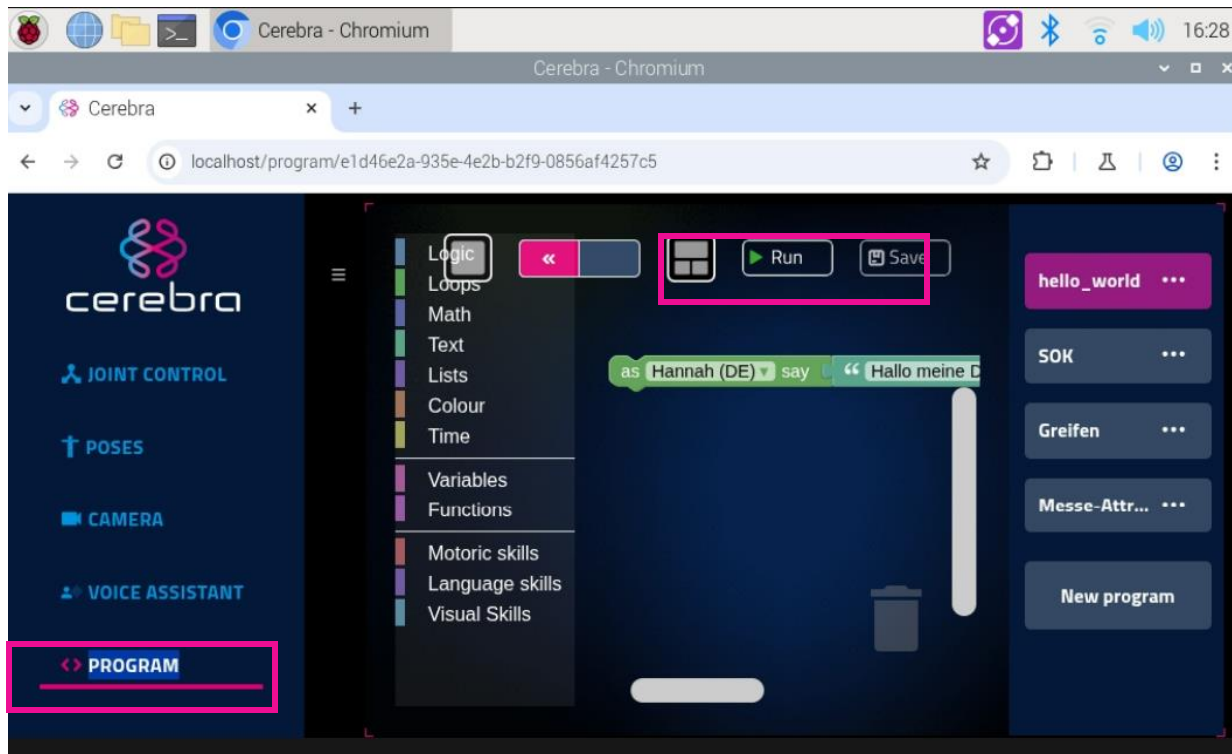
As a pib.Edubox owner, you get free access for one year from activation (<https://www.tryb.ai/pib-edubox-api-key/>)



Feature 4

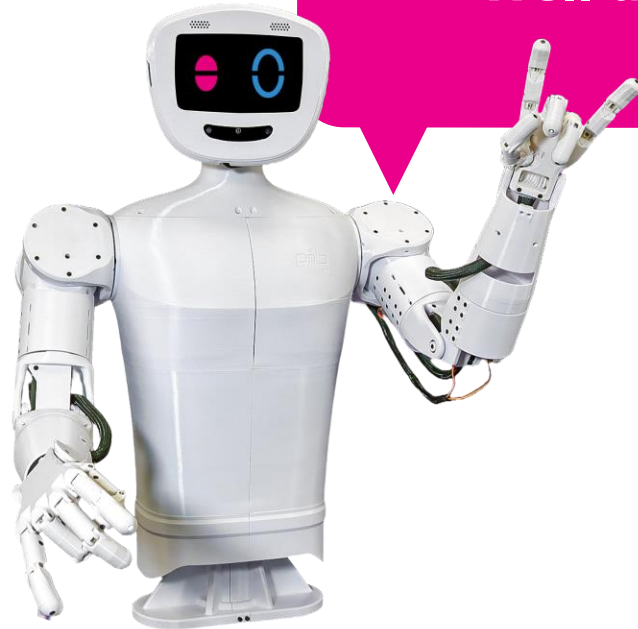


Click on block programming to create a script with basic blocks, then click run to start it



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.