

Set up AI Hardware Hub on a Raspberry Pi

About fifteen minutes, most of it waiting. You need a Raspberry Pi 5 or 4, a microSD card (8 GB or more), the official power supply and a computer to write the card.

1 · Write the SD card

1. Download the AI Hardware Hub image for your Pi from **mcpdevices.app** (file `ai-hardware-hub-pi-...img.xz`).
2. Install **Raspberry Pi Imager** from raspberrypi.com/software and open it.
3. **Device:** your Raspberry Pi model. **Operating system:** scroll down to **Use custom** and pick the downloaded file. **Storage:** your microSD card.
4. When asked "Use OS customisation?", choose **Edit settings:** set a hostname (for example `hub-pi`), a user name and password, your **Wi-Fi** name, password and country, and on the **Services** tab turn on **SSH**. Save, then **Yes** to write the card.

2 · Start the Pi

1. Put the card in the Pi. Plug your devices into USB (for example a Zebra label printer). With a cable network, plug in Ethernet too.
2. Connect power. The first start takes 2–3 minutes (the card is resized and Wi-Fi is set up).

3 · Link it to your account

1. When a label printer is connected, the Pi prints a small label: **Scan to connect**. Scan it with your phone, then create your free account or log in.
2. With a screen on HDMI, the same QR code is shown on the screen.
3. Or over SSH: `ssh user@hub-pi.local`. The QR code is shown at login; `hub claim` shows it again.

4 · Add it to your AI

Any AI assistant or agent that supports MCP works: Claude, ChatGPT, Cursor and others.

1. After linking, the website shows your connector address: `https://mcpdevices.app/mcp`
2. In your AI app add a remote MCP server (in Claude: **Settings** → **Connectors** → **Add custom connector**), name it `Hardware` and paste the address.
3. Click **Connect**, log in to your AI Hardware Hub account and click **Allow**.
4. Ask: *"Print a test label on my Zebra."*

Your own software uses the REST API with an API key from your account page:

mcpdevices.app/docs/api

Good to know

- The hub runs as a service and starts by itself after every power cut. Status: `systemctl status ai-hardware-hub`. Logs: `sudo journalctl -u ai-hardware-hub`.
- Updates install by themselves.
- `hub devices` lists what the Pi sees.

Something not working?

- **A device is missing:** open the app (status page), click **Don't see your device, or something isn't working?**, pick the device and press **Ask for support**. We add new devices quickly.
- **Anything else:** describe it in the same place and press **Send to the developers**, or write to **support@mcpdevices.app**.
- **Label printers** must speak ZPL (most Zebra printers). EPL/CPCL printers are listed but cannot print yet.