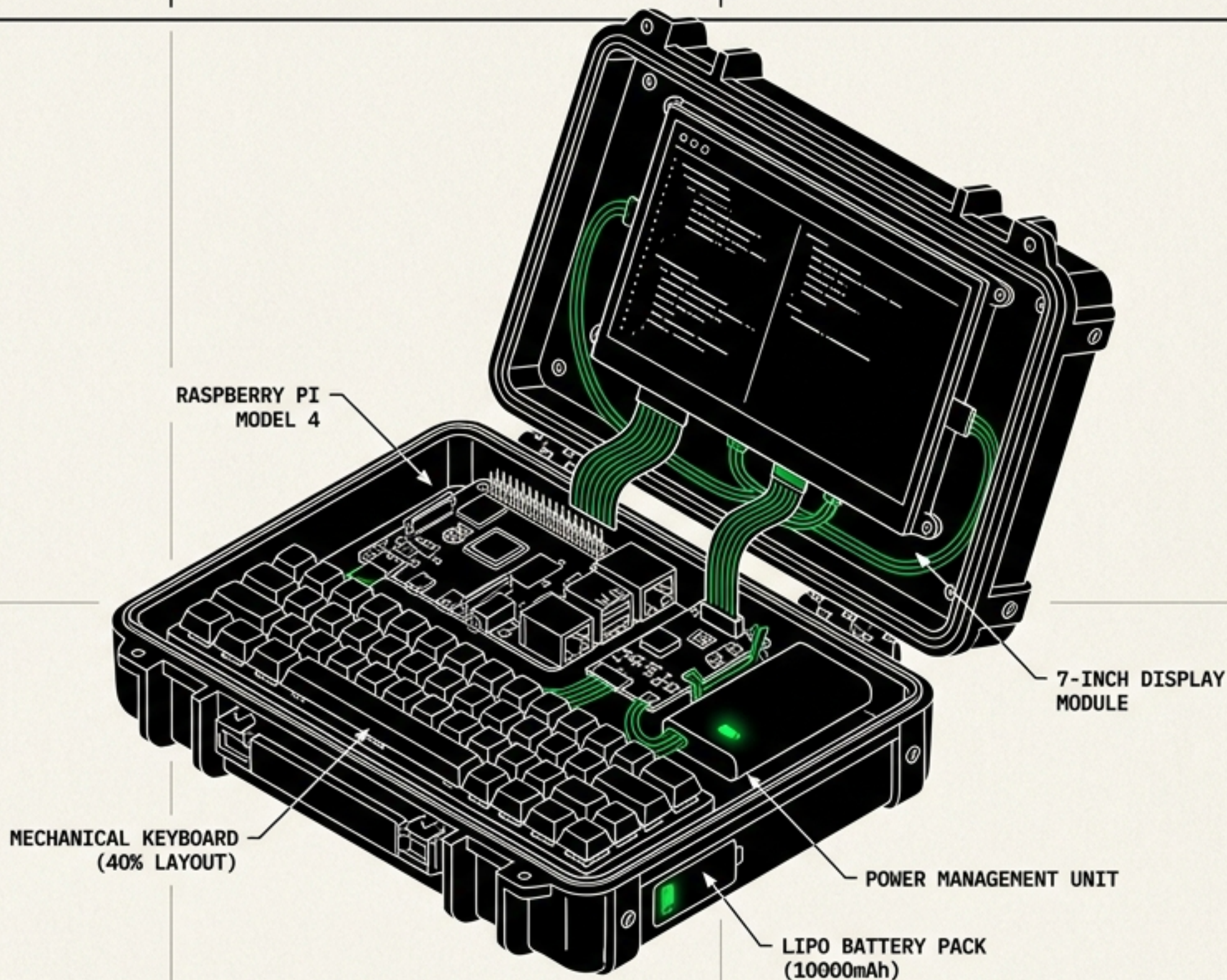


Build a Cyberdeck. Own your computer.

A field guide to building a hand-made Raspberry Pi machine—a self-driven device for the age of intelligence.



// **BUILD TIME:**
A weekend

// **SKILL FLOOR:**
Curious + patient

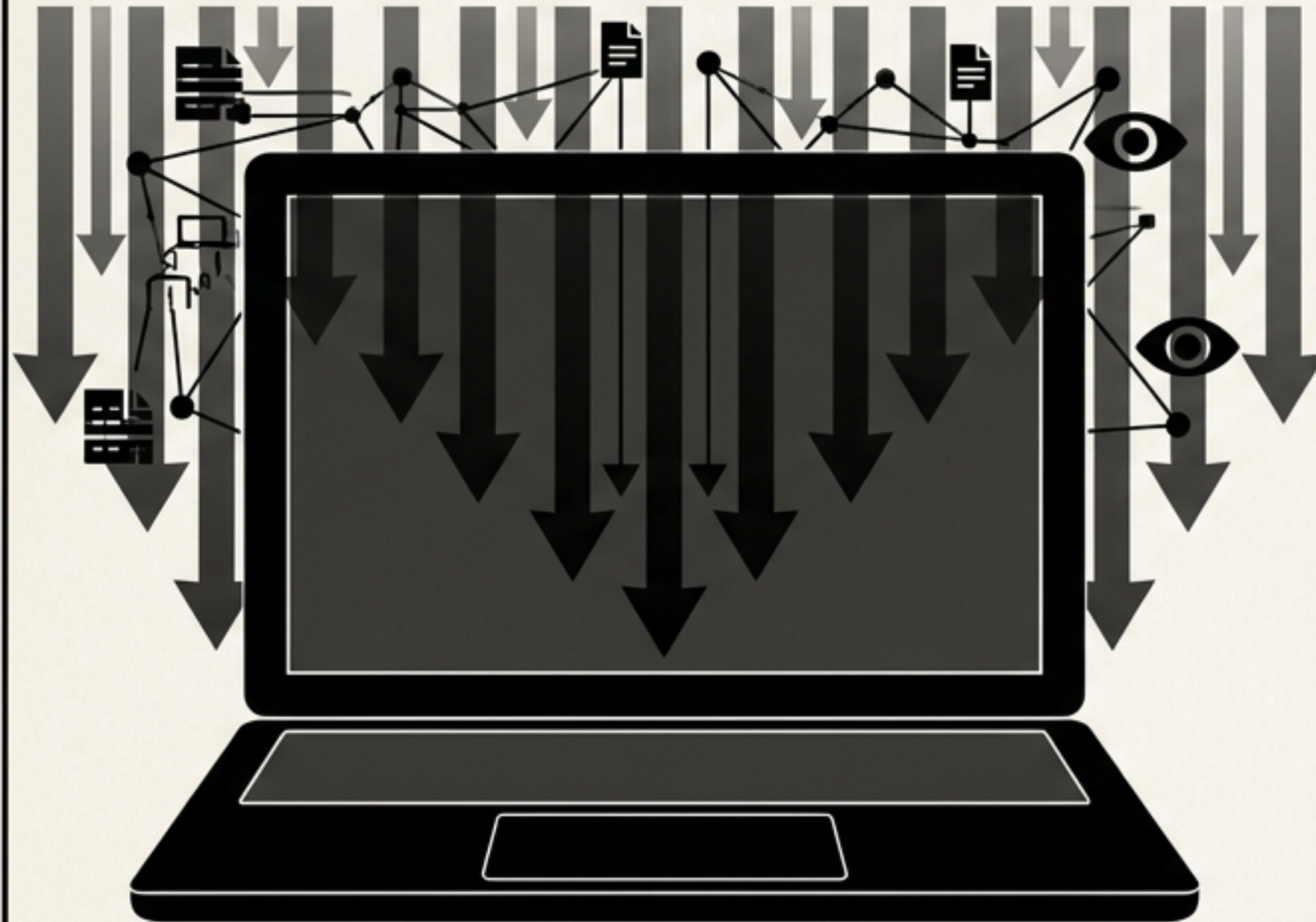
// **BALLPARK:**
\$250–450 USD

// **SOLDERING:**
Optional

A laptop is a sealed box of someone else's decisions.

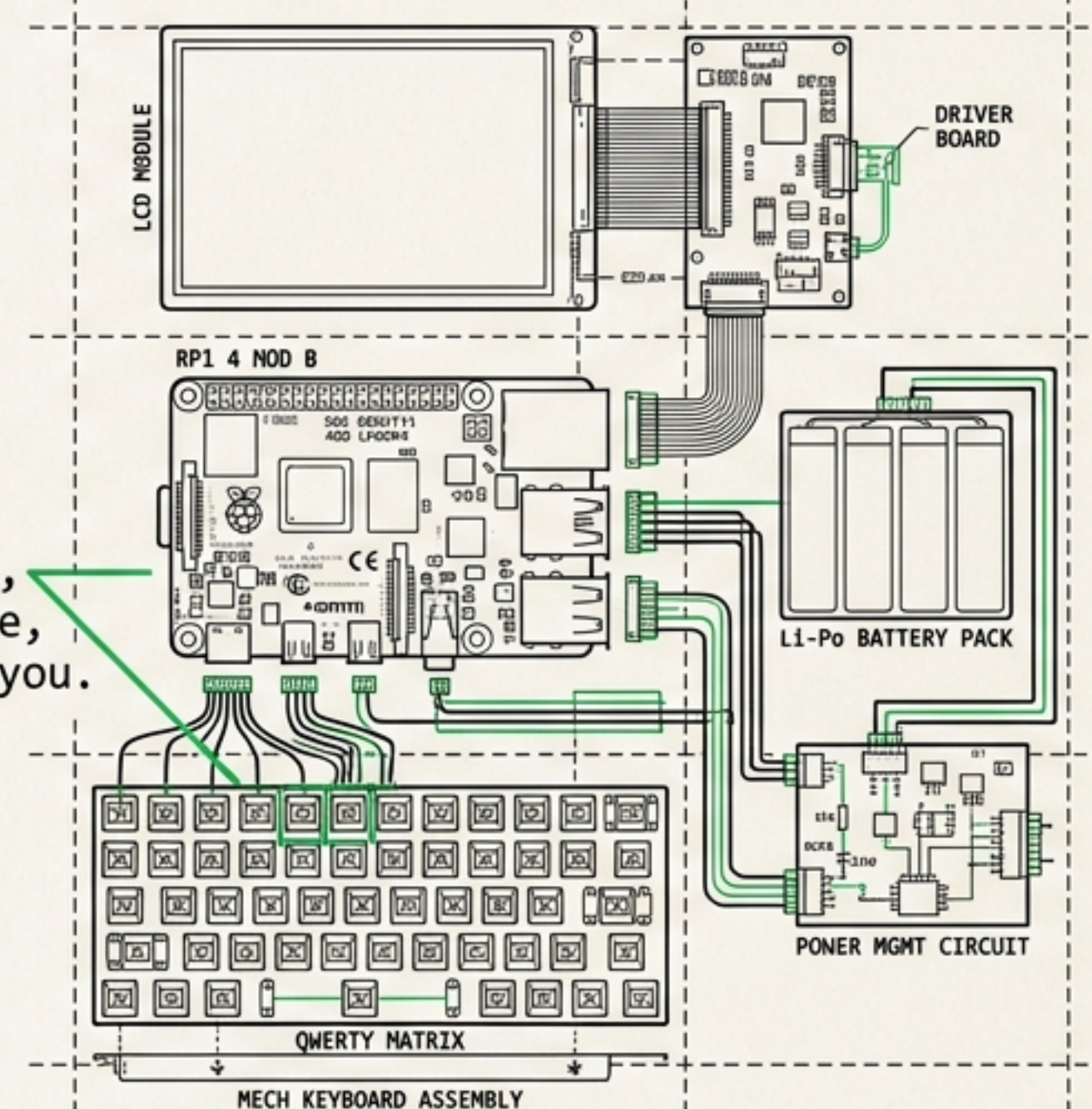
As intelligence gets cheaper and computing gets rented, metered, and tuned to harvest your attention, a deck you built by hand is a small act of sovereignty.

THE SEALED BOX



THE OPEN QUESTION

Every wire,
every choice,
legible to you.



One project. Four modes.

The rhythm of a hand-built machine maps cleanly onto a self-driven life.

Get curious to plan it, constructive to build it, caring to tend it, and chill to live with it.

01
Curious

Plan it (Decide shape and compute)

02
Constructive

Build it (Parts, assembly, flash)

04
Chill

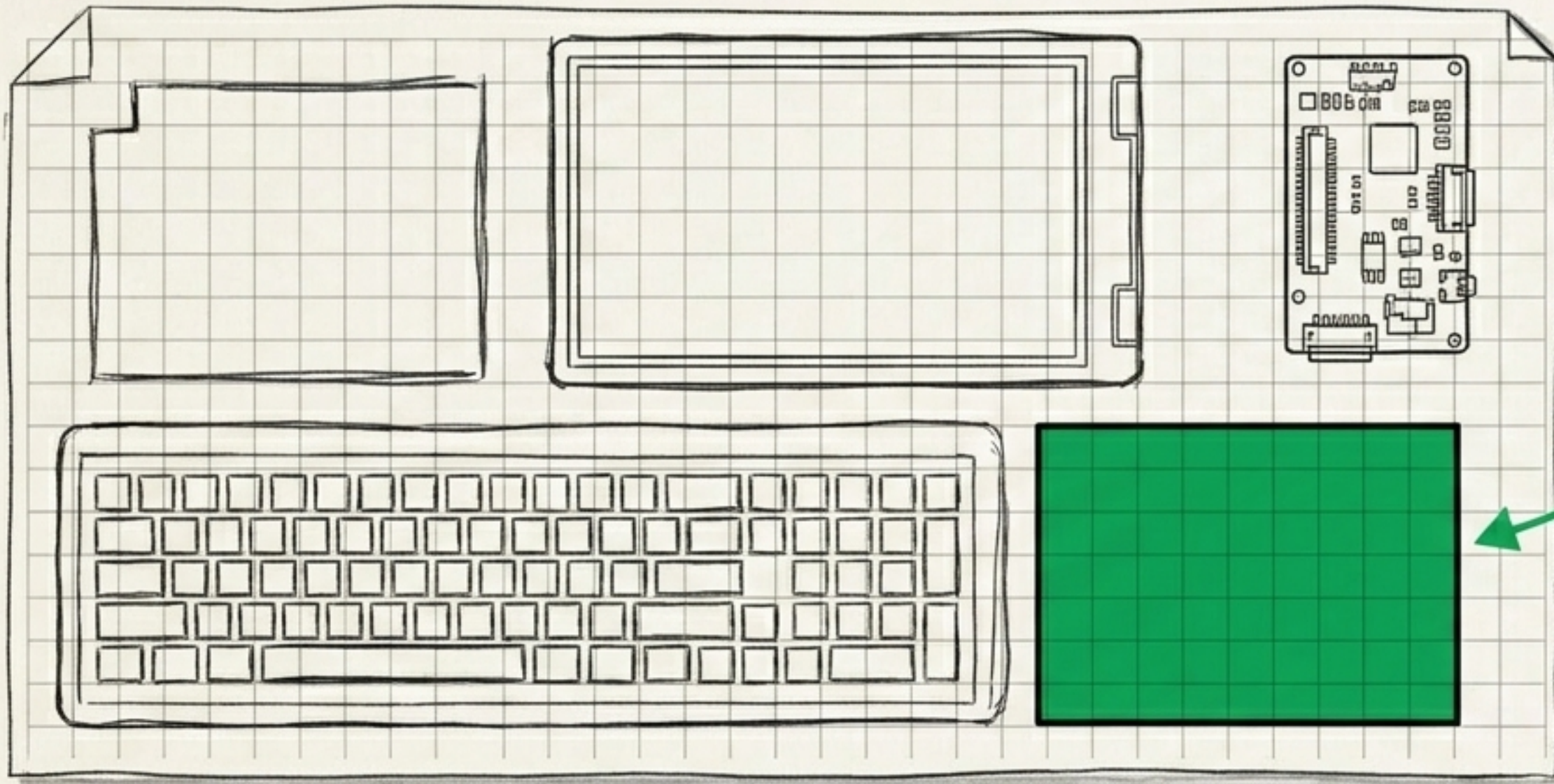
Live with it (Calm, offline-first)

03
Caring

Tend it (Backup, repair, share)

Mode 01 // **Curious:** Start with a question, not with parts.

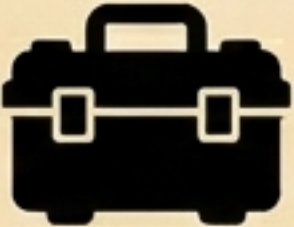
The honest answer to *what is this deck for?* shapes everything. Before buying a single component, sketch your deck on paper at 1:1 scale to discover your real constraints.



// THE CONSTRAINT
Almost always: where
does the battery go?

Match the architecture to the archetype.

Size your RAM and power to the job. The Pi 5 (4 GB) is the sweet spot for most builds.

Archetype	Recommended Compute	Power & Loadout
archetype A: The Pocket Deck 	Pi Zero 2 W or Pi 5 (small)	~1–2 W, 4–5" display, 40% keyboard. Headless-ish.
archetype B: The Field Deck  [RECOMMENDED]	Pi 5 • 4 GB	~5–8 W idle. 7" touch display, 60% mech keyboard. Off-grid capable.
archetype C: The Desk Deck 	Pi 5 • 8–16 GB	~5–15 W. NVMe SSD, local LLM, always-on.

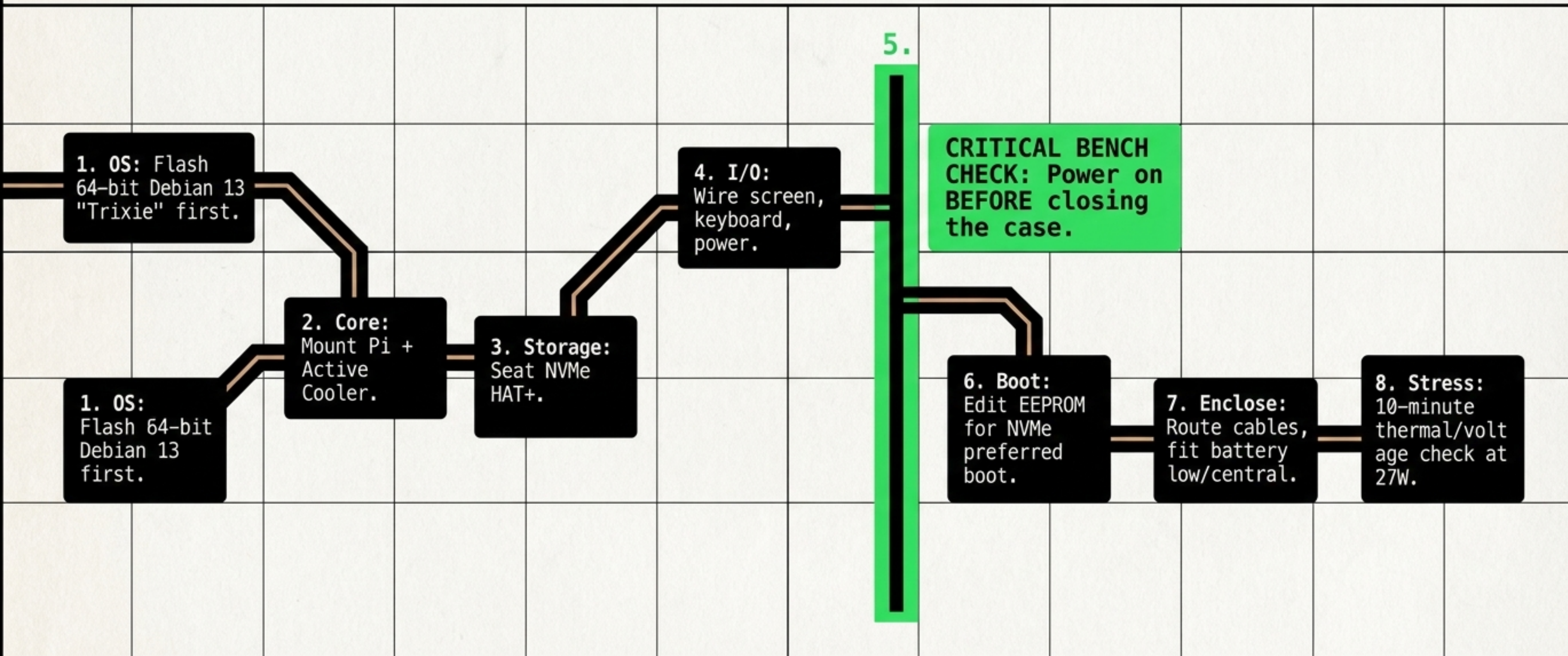
Mode 02 // Constructive: The Field Deck Loadout.

Momentum beats perfection. Adapt these parts to your shape, but get it booting on the bench before worrying about the enclosure.

SYSTEM COMPONENT	COST	FIELD NOTES
Compute: Raspberry Pi 5 (4 GB)	\$60-80	The brain.
Cooling: Active Cooler	\$5	Not optional. Prevents hot throttling.
Storage: NVMe SSD 256 GB + M.2 HAT+	\$40-55	Boots faster, lasts longer.
Power: UPS HAT + 2× protected 18650 cells	\$30-50	Clean shutdown + runtime.
I/O: 7" display + 60% mech keyboard	\$75-130	DSI display keeps USB free.
Shell: Rugged case or 3D print (PETG)	\$10-40	Pelican-style is classic.

Bench to bag: The 8-step assembly flow.

A deck that works in a cardboard box beats a beautiful case with no guts.



Mode 03 // Caring: Tend the machine, look after the community.

Longevity is a design value, not an accident. Care is mostly just attention paid forward.



Keep it Healthy

- Image the SSD for backups.
- Use protected 18650 cells and fuse lines.
- Blow dust out of the cooler.



Give Back

- Publish the STL/cut files.
- Post mistakes and fixes on r/cyberDeck or cyberdeck.cafe.
- Help one person who asks a question you once had.

Mode 04 // Chill: A machine that thinks with you, not at you.

The point was never the parts. Set your deck up to be calm by default. The constraint is the feature.

// Offline-first

Airplane-mode-with-intent.

Connect when you choose to, not because a server pinged you.

// No feed lives here

A deck with no infinite scroll is a quiet room. Keep addictive surfaces off it entirely.

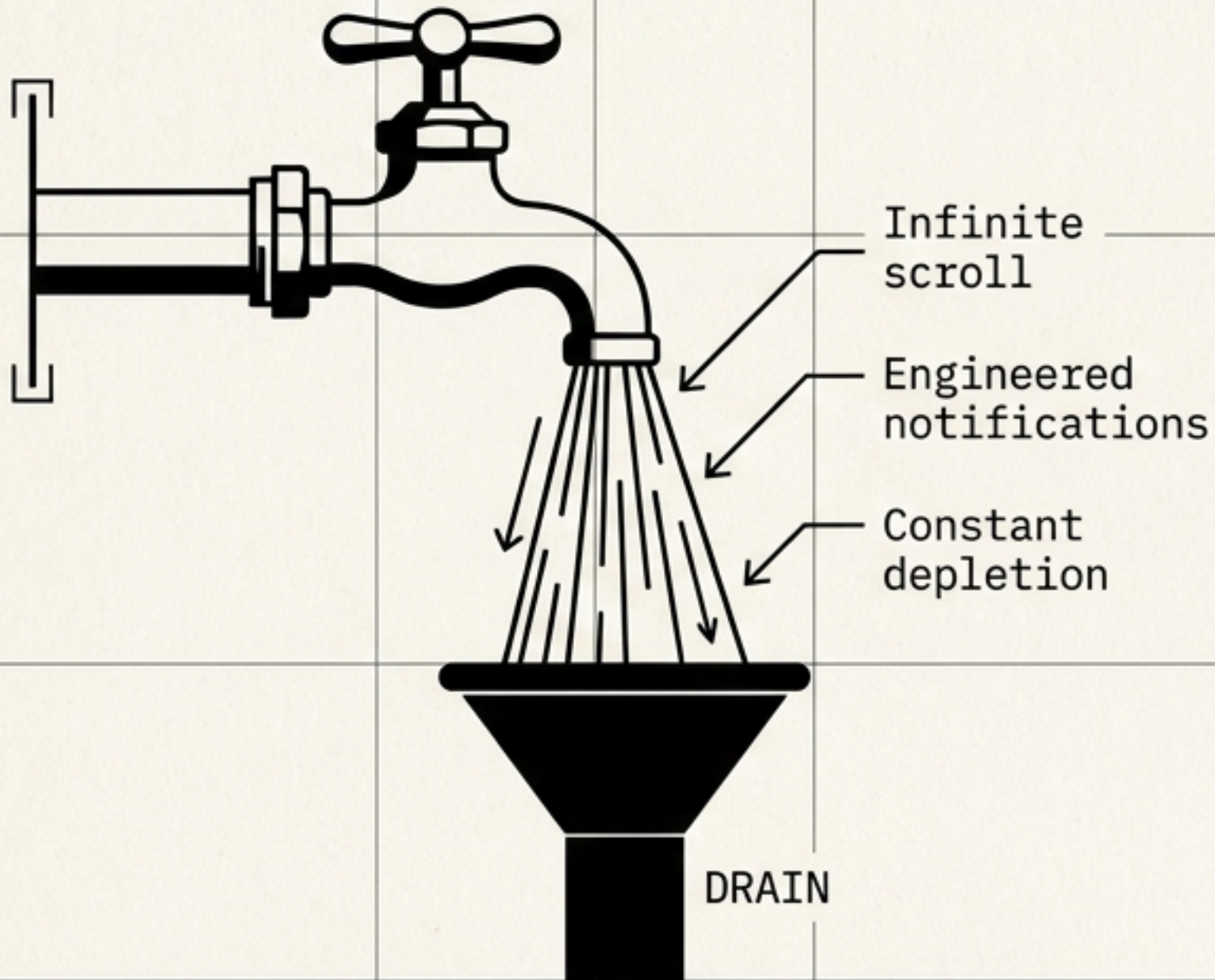
// Done is a place to rest

There is always another HAT or mod. Use it. A working deck in your bag beats a perfect one on the bench.

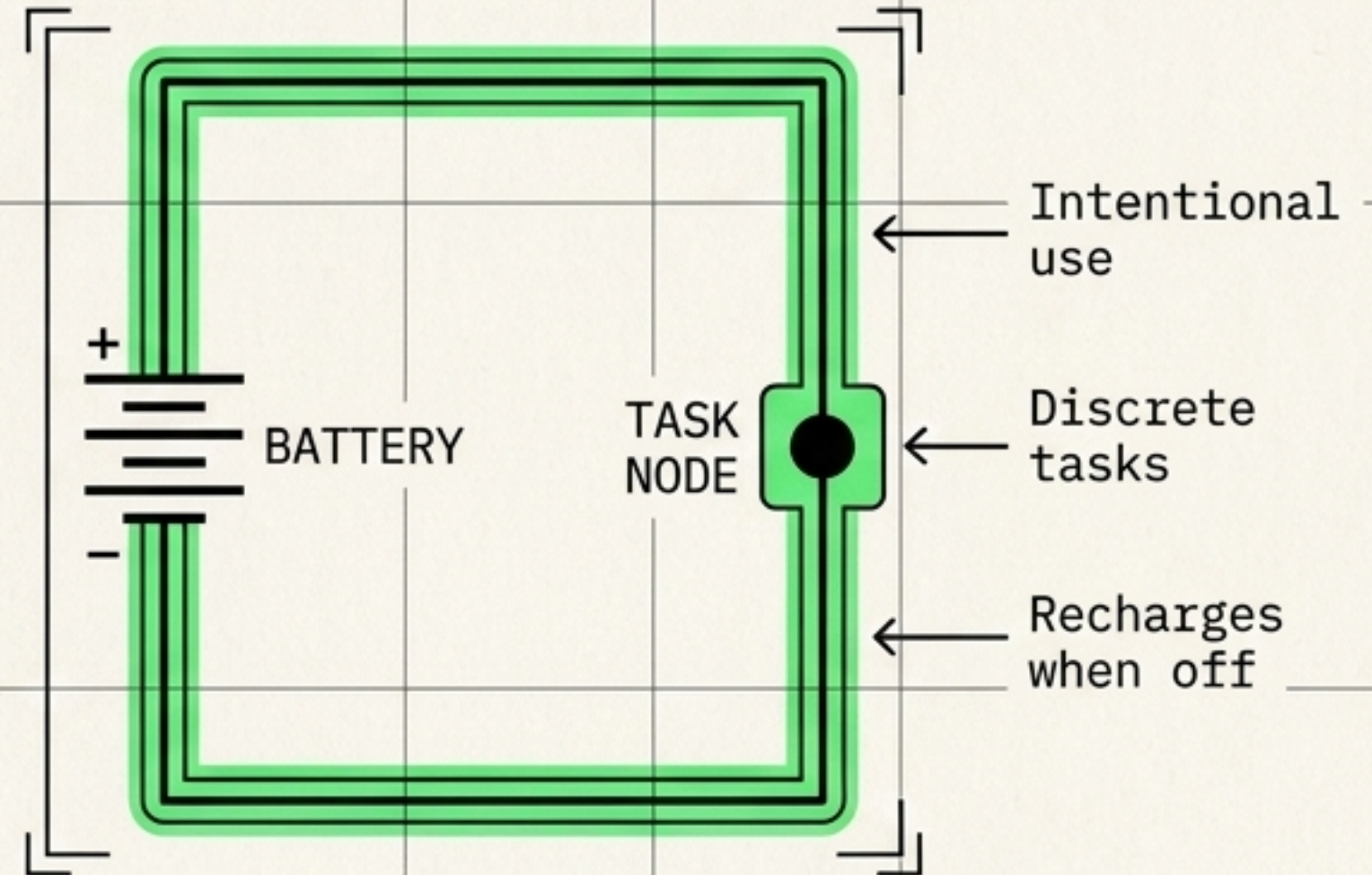
Attention is a battery, not a tap.

A device built to respect its own power limits is a daily reminder to respect your own.

Rented Computing



Calm Computing



The deck is the lesson, not the gadget.

You don't have to pick up a soldering iron to keep the mindset.

In the Deck

- Builder opens the case & learns the wires.
- Assembled by choice, not bought whole.
- No feed engineered to pull you back.

In Your Life

- Literacy is leverage: Ask how your tools work.
- Prefer tools you can shape over tools that shape you.
- Pick tools that respect your attention.

No workbench required.

Six small moves that carry every value of the deck—none of which need a single screw. Pick one this week.

// curious

Run a sealed-box audit.

Name 3 daily tools. Do you know how they work? Notice which ones own you.

// constructive

Make one finishable thing.

A page, a script, a shelf. Ship it rough. Change the consume/make ratio.

// caring

Repair over replace.

Fix one thing this month you'd normally bin (a jacket, a lamp, a habit).

// caring

Document one thing publicly.

Write down a solution where a stranger can find it at 1 a.m.

// chill

Keep one feed-free device.

An e-reader or wiped old phone. One surface with no engineered pull.

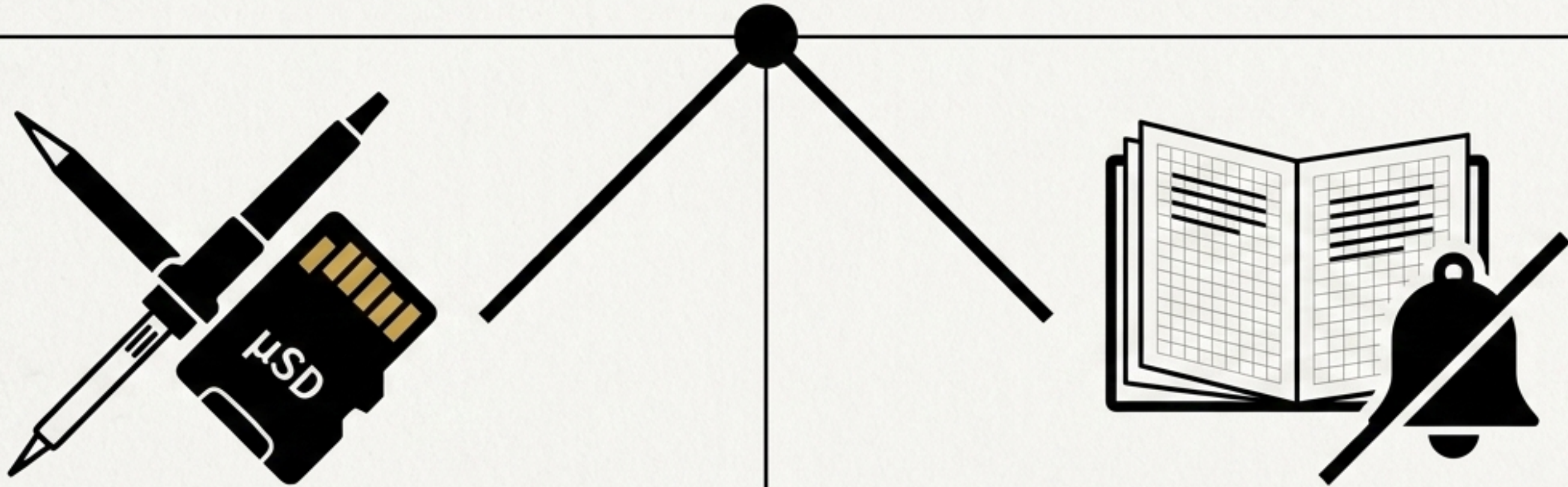
// chill

Choose the tool you can turn off.

"Off" being possible is a feature worth paying for.

Choose your path.

The deck doesn't make you self-driven. It just makes a self-driven mindset something you can see and hold.



Sketch the shape this weekend.
Order one part. Build the hardware.

Run the sealed-box audit.
Turn off the feed. Change the posture.

// Be Curious. Be Constructive. Be Caring. Be Chill.