



Framework Laptop 12 DIY Edition Quick Start Guide

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INTRODUCTION

Congratulations on getting the Framework Laptop 12 DIY Edition! Follow this quick start guide to assemble your laptop and get it running.

If you got the Pre-built Framework Laptop 12, [follow this Quick Start guide instead](#).

If you're bringing your own memory, the SO-DIMM memory slot supports up to 64 GB of DDR5 memory at DDR5-6400 speed (Intel Core Series 3) or 48 GB of DDR5 memory at DDR5-5200 speed (Intel Core 13th Gen).

Click below for a list of validated memory modules:

- [Intel Core Series 3](#)
- [Intel Core 13th Gen](#)

You'll encounter some component terms in this guide:

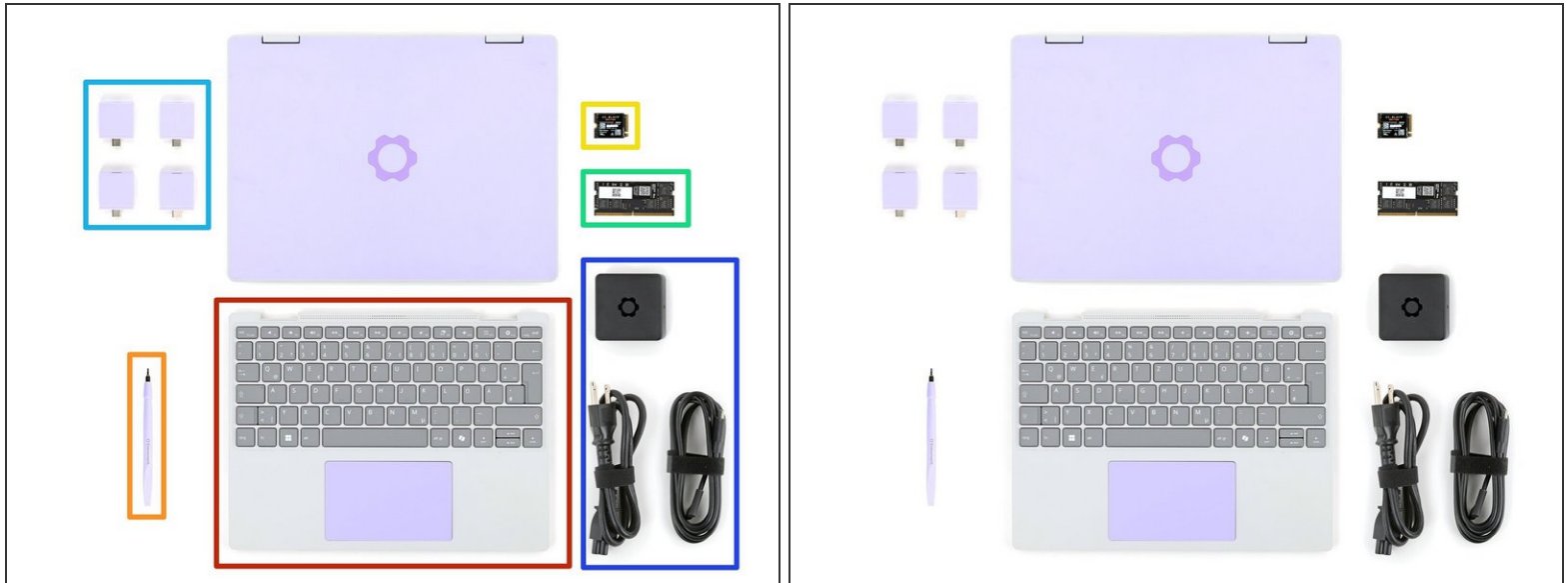
- The **Input Cover** is the part that contains the Keyboard and Touchpad.
- The **Framework Screwdriver** is the nifty multi-tool that comes with your Laptop.



TOOLS:

- [Framework Screwdriver](#) (1)
-

Step 1 — Unbox your Framework Laptop



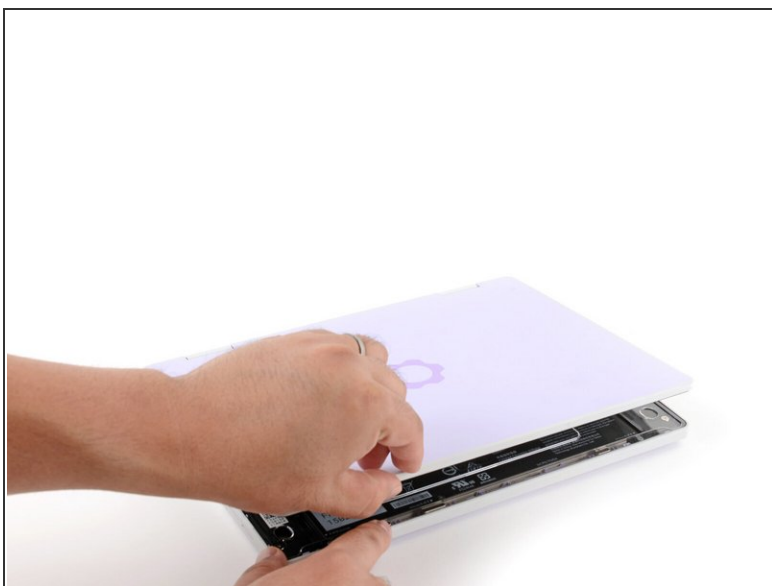
- ① Unbox your Framework Laptop and make sure you've received the following items:
 - Input Cover of your choice
 - Framework Screwdriver
- ① Additionally, make sure you've received the optional items you purchased with your Framework Laptop:
 - Storage/ SSD
 - Memory module/ RAM
 - Expansion Card(s)
 - Framework Power Adapter, USB-C Cable, and AC Cable

Step 2 — Set your Laptop on a clean surface



- ① Make sure your Framework Laptop is fully powered off. The indicator LEDs along the edges should be unlit. The laptop should be silent.
- ① If you accidentally turn on the laptop during assembly, hold the power button down for 10 seconds to shut it down.
- Set your Laptop face-up on a clean work surface.
- ① Make sure your Framework Screwdriver has the T5 Torx bit (labeled as T-5) facing outwards. If it's not, pull the bit out and flip it.

Step 3 — Swing the lid open



- Swing the lid open until the screen's tilted back slightly.

Step 4 — Remove the clear tray



- Use your fingers to lift and remove the clear protective cover from the Laptop.
 - ① The protective cover is made of post-consumer recycled PET and is highly recyclable. Please recycle this with your household recycling.

Step 5 — Install the Storage



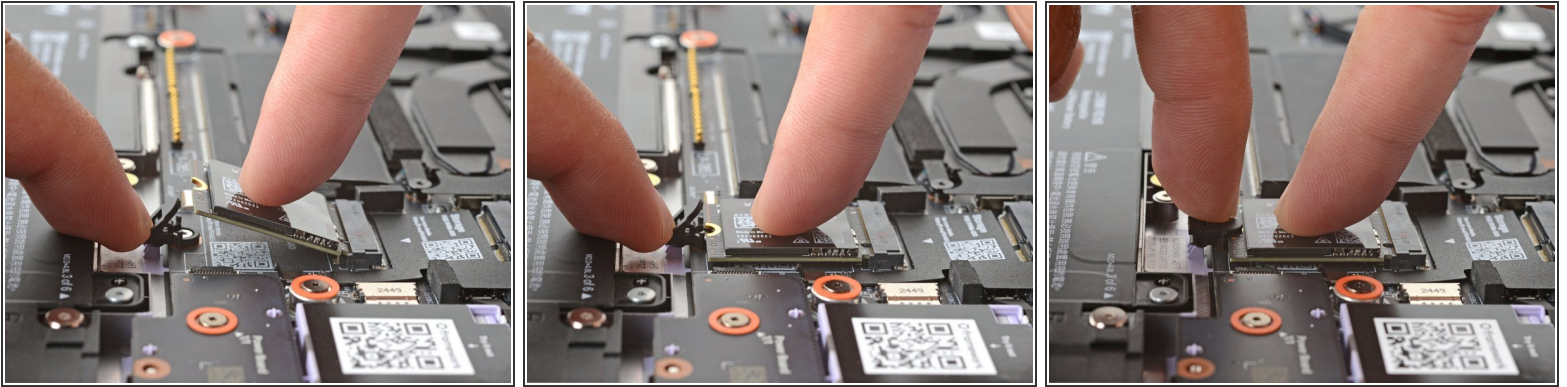
① The next two steps show how to install the storage (aka SSD, or Solid State Drive).

① Your Framework Laptop 12 has one M.2 2230 NVMe SSD slot.

⚠ **Hold the SSD by its edges. Don't touch the gold contacts with your fingers . If you do, wipe the contacts with a clean, lint-free cloth to remove any finger oils.**

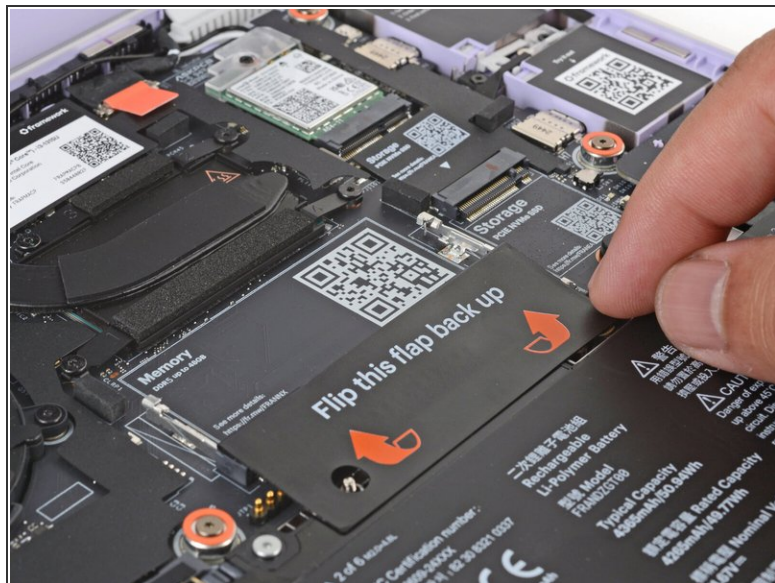
- Align the SSD's gold contacts and notch with the socket.
- Insert the SSD into the socket at a shallow angle. The gold contacts should be mostly covered by the socket.
- ① The SSD fits into the socket in one orientation. If it doesn't feel like it fits, try flipping the module.

Step 6 — Install the Storage - (Continued)



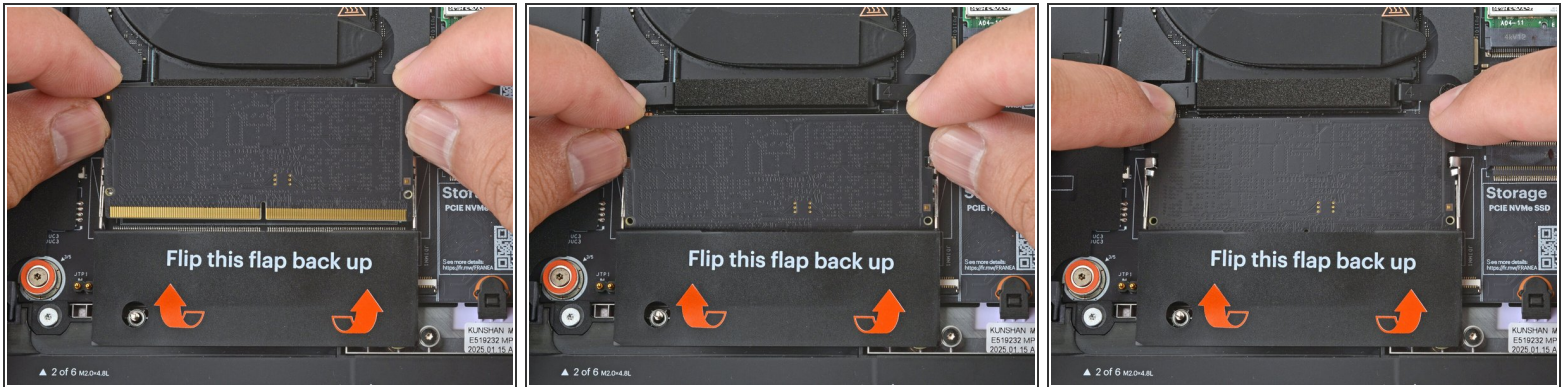
- Use your finger to press the black SSD latch and keep it open.
- Use another finger to press the SSD down until it lays flat.
 - ⓘ If the SSD doesn't fit in the latch, you may need to insert the SSD further into its socket.
- Use your finger to close the latch to secure the SSD in place.
 - ⓘ You should hear a click, and the SSD should no longer pop up.

Step 7 — Install the Memory module



- ① The next three steps show how to install the memory module.
- ① Your Framework Laptop 12's memory slot supports up to 48 GB of DDR5 memory at DDR5-5200 speed (*Intel Core 13th Gen*) or 64 GB of DDR5 memory at DDR5-6400 speed (*Intel Core Series 3*).
- Use your fingers to flip open the memory flap.

Step 8 — Install the Memory module - (Continued)



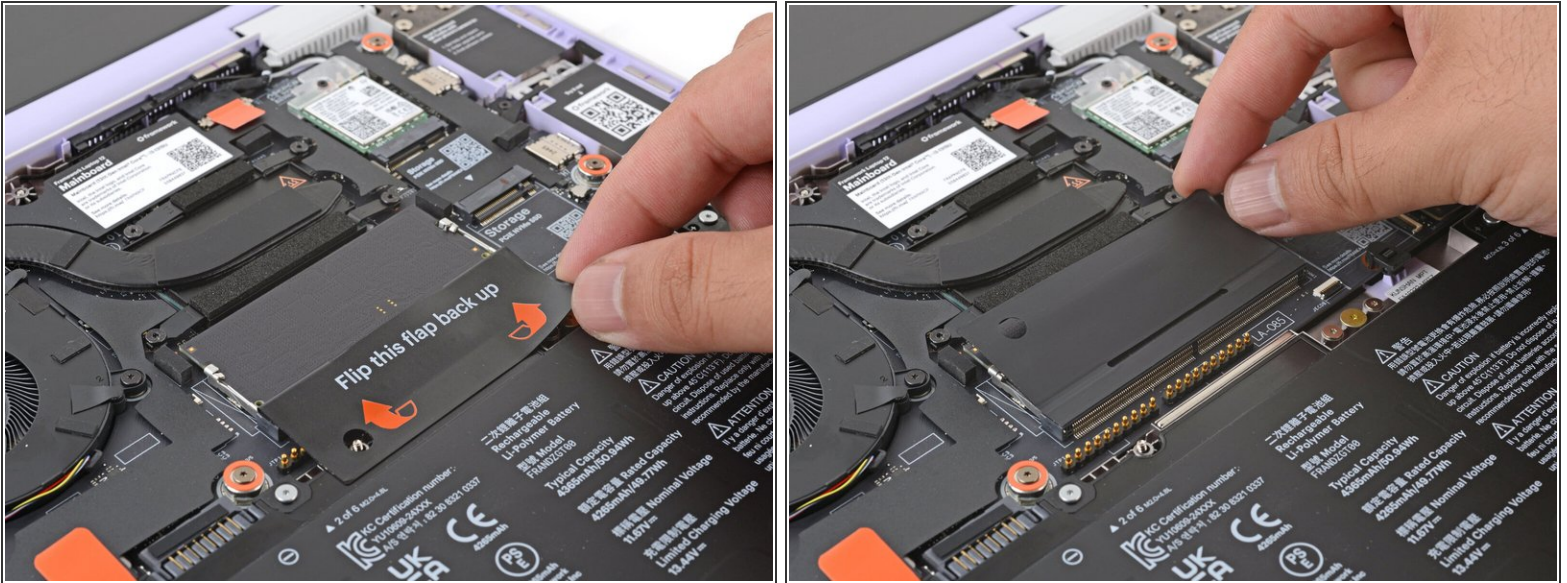
⚠ Hold the memory module by its edges. Don't touch the gold contacts with your fingers . If you do, wipe the contacts with a clean, lint-free cloth to remove any finger oils.

- Orient the module with the label facing down and align the gold contacts and notch with the socket.
- Insert the contact edge into the socket at a shallow angle. The gold contacts should mostly be covered by the socket.
- ① The module fits into the socket in one orientation. If it doesn't feel like it fits, try flipping the module.

⚠ Intel Core Series 3 Mainboards have the RAM flipped compared to these images. The shorter side of connectors will be on the left.

- Press the edges of the memory module down until the side clips lock it in place.
- ☑ If you need to remove or reposition the memory module, use your fingers to spread both clips apart to release the memory.

Step 9



- Flip the memory flap back over the memory module.

Step 10 — Install the Input Cover



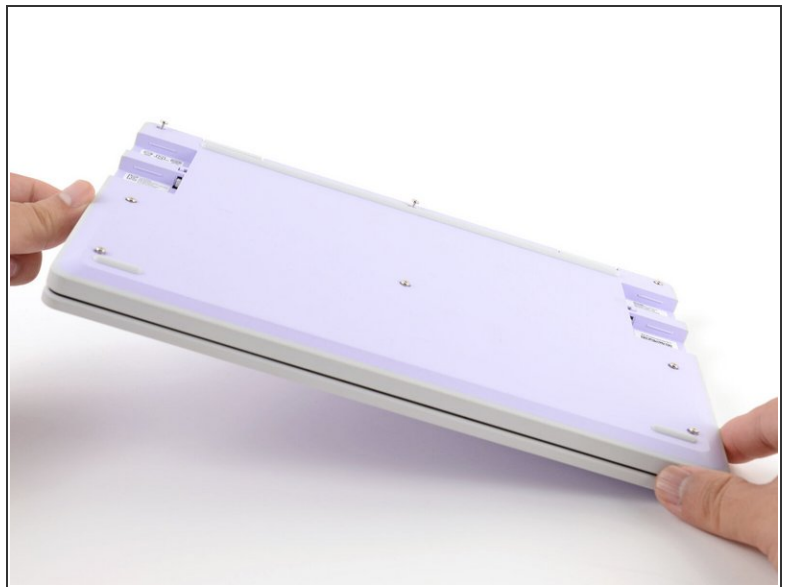
- Hold the Input Cover over the Laptop and angle the bottom edge of the cover towards the base of the Laptop.
- Align and insert the bottom edge of the Input Cover to the base of the Laptop.
 - Make sure the slots along the bottom edge of the Input Cover slide into the tabs in the base.

Step 11 — Install the Input Cover - (Continued)



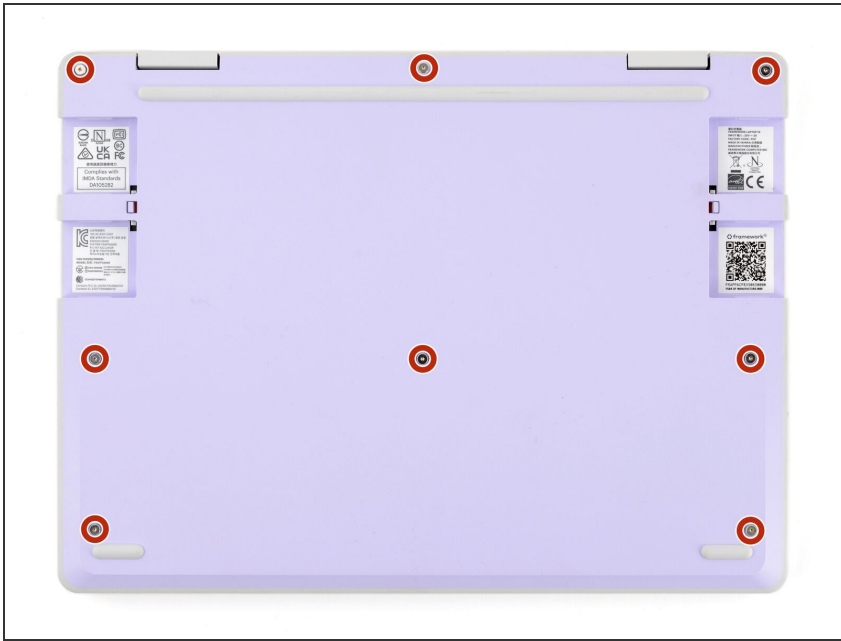
- Lower the Input Cover's top edge onto the Laptop until the magnets snap it in place.
- ① Make sure the Input Cover sits neatly within the Laptop frame and no corners are popping up.

Step 12 — Flip the Laptop over



- Close the Laptop lid.
- Flip the Laptop face-down.

Step 13 — Tighten the bottom screws



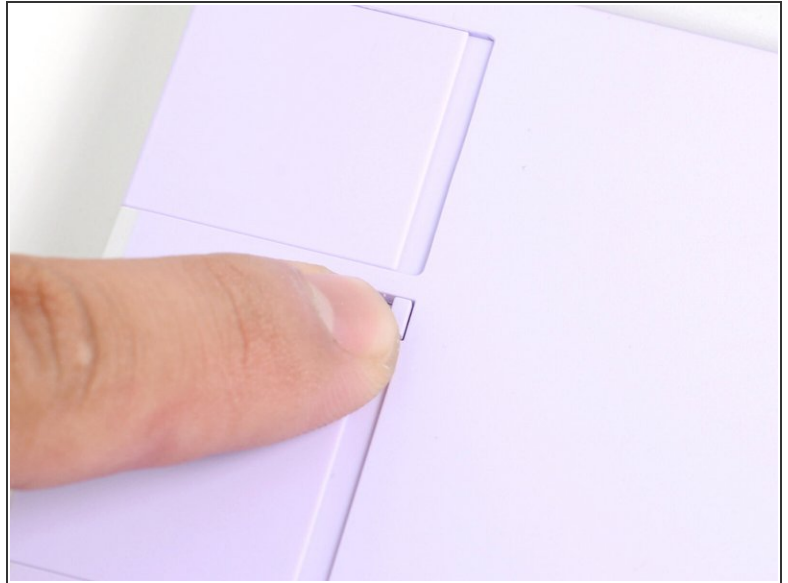
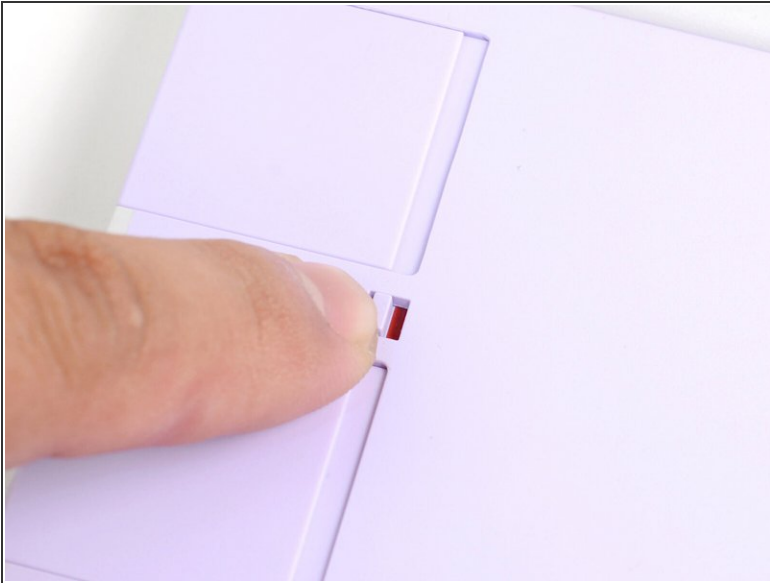
- Use your Framework Screwdriver to tighten the eight captive T5 Torx screws on the bottom of your Laptop.
- ⓘ Tighten these screws until they're snug. Don't over-tighten, or you may strip the screws.

Step 14 — Install the Expansion Cards



- ① The next two steps show how to install Expansion Cards.
 - ① You can charge and use your laptop without Expansion Cards. To charge, plug a USB-C cable directly into any unused Expansion Card slot. The slot's USB-C port is recessed, so not all cables may work.
- Slide an Expansion Card into an Expansion Card slot.
 - ① You can check the following links to see what Expansion Cards are supported in each slot for ([Intel Core Series 3](#)) and ([Intel Core 13th Gen](#)).
 - ① You don't need to unlock the latches to install the Expansion Cards—only when you want to remove them.
 - ① The Expansion Cards should click in place, and the front edge should be flush with the Laptop.
- Repeat the procedure with the remaining Expansion Cards.

Step 15 — Lock the Expansion Card slots



- If there's a red bar showing under each Expansion Card latch, use your finger to flip the latch and lock the Expansion Card into its slot.
 - ① Locking the Expansion Card slots help keep the cards in place when you unplug cables from them.

Step 16 — Assemble the Framework Power Adapter



- Plug the AC Cable into the Power Adapter.
- Plug the USB-C Cable into the Power Adapter.
 - ① You can plug either end of the USB-C cable into the adapter.
- Plug the AC Cable into a power outlet.

Step 17 — Plug in the Laptop



- ① Your Framework Laptop ships in shipping mode, where the battery is disabled until you plug the laptop in for the first time.
- Plug the USB-C Cable into any USB-C port on your Laptop.

Step 18 — Install an OS



- You're done assembling your Framework Laptop! Now, you'll need to install an OS.
 - ① If you're installing Microsoft Windows, [check out this guide](#).
 - ① If you're installing Linux, [check this page for more details](#).
- ① **After installing new memory, the laptop will take longer to start up for the first time, and the screen will turn on slower.** This is normal—the system is performing memory training.
- ① This may take a few minutes depending on how much memory has been installed.

For drivers, firmware, and software updates, [check out this page](#).

If you need help, contact [Support](#).