Alto® Quick-Start Guide

Step 1: Upon Receipt
Carefully remove packing materials and save for future shipment or storage. Confirm receipt of instrument and all components. Examine your Alto for any damage incurred during transit and verify that the microSD is already installed.

Step 2: Downloading the software and connecting the device
Download the Cerillo Labrador software onto your computer at cerillo.bio/software. Use the provided USB cord to connect your Alto to your computer and confirm communication between Labrador and your Alto. Connecting wirelessly: Connect Canopy to your computer and power your Alto (Step 6). Follow instructions on the Canopy Quick Start Guide to set up and confirm communication between Labrador, Canopy, and your Alto.

Step 3: Experimental setup
Set the measurement interval in Labrador by clicking on your device and then Settings (gear icon in the top-right corner of the screen). Formatting your plate layout/data is easiest after running your experiment. Place your Alto where you'd like to collect measurements. This is anywhere your samples will be happy— in an incubator, anaerobic chamber, benchtop, hood, etc. See detailed specs in your User Manual.

Step 4: Power the device
Use the USB cable provided to plug your Alto into the power adapter and a standard wall outlet, a battery pack, or a computer.

Step 5: Allow for equilibration
Ensure that the Alto maintains a consistent temperature throughout the experiment, particularly during calibration. To achieve this, allow the Alto to adjust to new environmental conditions while connected to power for a minimum of 4 hours. For optimal results, consider overnight equilibration, such as placing the Alto in an incubator after inoculating your starter culture. If feasible, allow the plate to equilibrate as well.

Step 6: Seal your plate
Measurements can be taken with or without a plate lid or using a transparent, breathable membrane. Membranes, such as Breathe-Easy, are most effective at preventing measurement errors caused by condensation or evaporation.

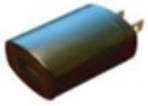
Step 7: Go! (See reverse side)

Included in this shipment:

Alto

MicroSD Card

USB Cable

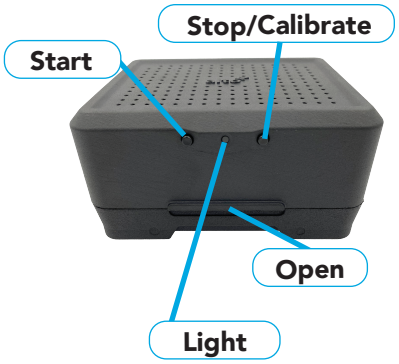


Power Adapter

Note: If your experiments require shaking, we recommend shaking at 350rpm. Check user manual for more instructions.

Measurements:

Labrador can be used to start and stop a read while the device is connected. Otherwise use the buttons according to the following diagram:



Start

Press:
Endpoint Experiment

Hold:
Kinetic Experiment

Stop/Calibrate

Press:
Stop Experiment

Hold:
Calibrate

- White: Booting
- Green: Read/Reading
- Red: Stop
- Yellow: Between Readings
- Cyan: Calibrating

Endpoint reading

Calibrate while empty, then begin experiment: Press and hold the stop/calibrate button until the status light flashes white. Release the button. The status light will turn cyan, indicating that the device is calibrating. Wait for the status light to turn off, indicating that calibration is complete. Insert your plate into your Alto. Press and quickly release the start button. The status light will briefly turn green to indicate the experiment has started. The light will turn yellow when the Alto has completed collecting data.

Kinetic experiment

Option 1 (default) - *Auto-calibration to plate, then begin experiment:* Insert your plate into your Alto. Press and hold the start button until it flashes white. Once the button is released, the status light will turn cyan during calibration, and then green during measurement. The Alto will automatically continue with measurements after calibration. Note: If "enable kinetic auto-calibration" has been unchecked, Option 2 will become default instead of Option 1.

Option 2 - *Calibrate while empty, then begin experiment:* In Labrador, navigate to your device, click the gear icon to access settings, uncheck "enable kinetic auto-calibration," and click "save." Your device will no longer automatically calibrate before starting experiments. Follow the same calibration procedure described in "Endpoint reading" above. Once calibration is complete, insert your plate. Press and hold the start button to begin an experiment as described in Option 1 above. The device will immediately begin taking measurements, as indicated by a green status light.

Ending an experiment: Press the stop button. The status light will turn red. If the Alto is in the middle of a read, you may need to press the stop button again and hold until the light turns red.

Accessing and storing data

Data collected is automatically stored on the microSD card. The Alto must be powered off when the microSD card is inserted or removed to avoid corrupting the card, rendering it incapable of recording future data. Data stored on the microSD card can be accessed by directly connecting the Alto to your computer using the provided USB cable, any commercially available microSD card adapter, or wireless transfer through Cerillo's Canopy.

Need help setting up your device? Visit our Help Center at www.cerillo.bio/help-center or scan the adjacent QR code.