Your new Stratus is an L.E.D.-based plate reader used to measure optical densities in standard plate formats.

Stratus Components

Stratus (1)   microSD card (1)   USB Cable (1)   Power Adapter (1)

Step 1: Get Started. Confirm receipt of all components and device (shown above). The microSD card may already be installed in the Stratus.

Step 2: Location. Place your Stratus where you'd like to measure. This is anywhere your samples will be happy – incubator, anaerobic chamber, benchtop, hood, etc.

Step 3: Power the Device. First, insert the microSD card. Then, plug the power adapter into a standard wall outlet, and the USB cable into the power adapter and the Stratus.

Step 4: Allow for Equilibration. The Stratus needs 60 minutes to equilibrate to new environmental conditions. This can be a good time to do your experimental prep work.

Step 5: Go! (See reverse.)

Important Notes
1. The Stratus should only be used with the provided USB 2.0 cable. The Stratus is not compatible with USB 3.x cables.
2. Additional technical information is provided at cerillo.net.

Recommended Protocol for Sample Measurement

For a single read:
1. The Stratus needs calibration after equilibrating to a new environment. Hold down the Stop (right) button until the status light flashes. Then release it. When the status light turns off, calibration is finished. The calibration process takes about 3 minutes; do not press any buttons during calibration.
2. Insert the plate, then press and release the Start (left) button on the Stratus to read your plate once.

For continuous reads:
Press the Start button and hold until the status light begins to flash white. After a 10 second delay the Stratus will auto-calibrate and then begin to continuously read. To stop a reading in progress, press the Stop (right) button until the status light turns red.

Reading your data from the microSD card
Collected measurements are automatically stored on the on-board microSD card. You can use any commercially available adapter to access the data from the card. When inserting the card into the Stratus, do so with the Stratus unplugged; otherwise, the card will not be recognized and future data will not be recorded.
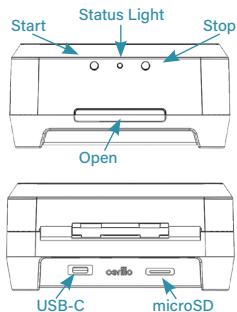
Data files are stored in order of when your experiment took place (in "YYYYM-MDD" format). Inside each day's folder are data files titled by the time the experiment was started (in "hh-mm-ss" format). These are saved as standard .csv files, and can be opened in any spreadsheet or data analysis software. The Stratus' internal clock is already set to your time zone by Cerillo at the time of shipment.

Using the Stratus with a Computer
The Stratus can be operated by plugging the provided USB cable into a computer's USB port instead of the power adapter. If you would additionally like to control the Stratus and read its data from that computer, you will have to download Cerillo software at cerillo.net/software. This software enables direct control, data access, and configuration of the Stratus.

Support and Troubleshooting
If you have any problems whatsoever, please contact us at support@cerillo.net.

Start — Status Light — Stop

Open

USB-C — cerillo — microSD

○ White: **Booting**
🟢 Green: **Read/Reading**
🔴 Red: **Stop**
🟡 Dim Yellow: **Between Reads**
🔵 Cyan: **Calibrating**
🟢 Green/White: **Continuous Read**
🔴 Red/White: **Calibrate**