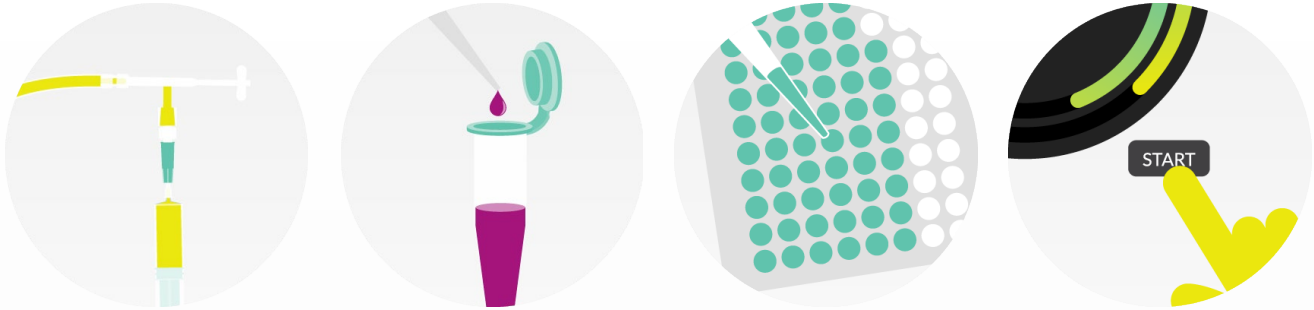


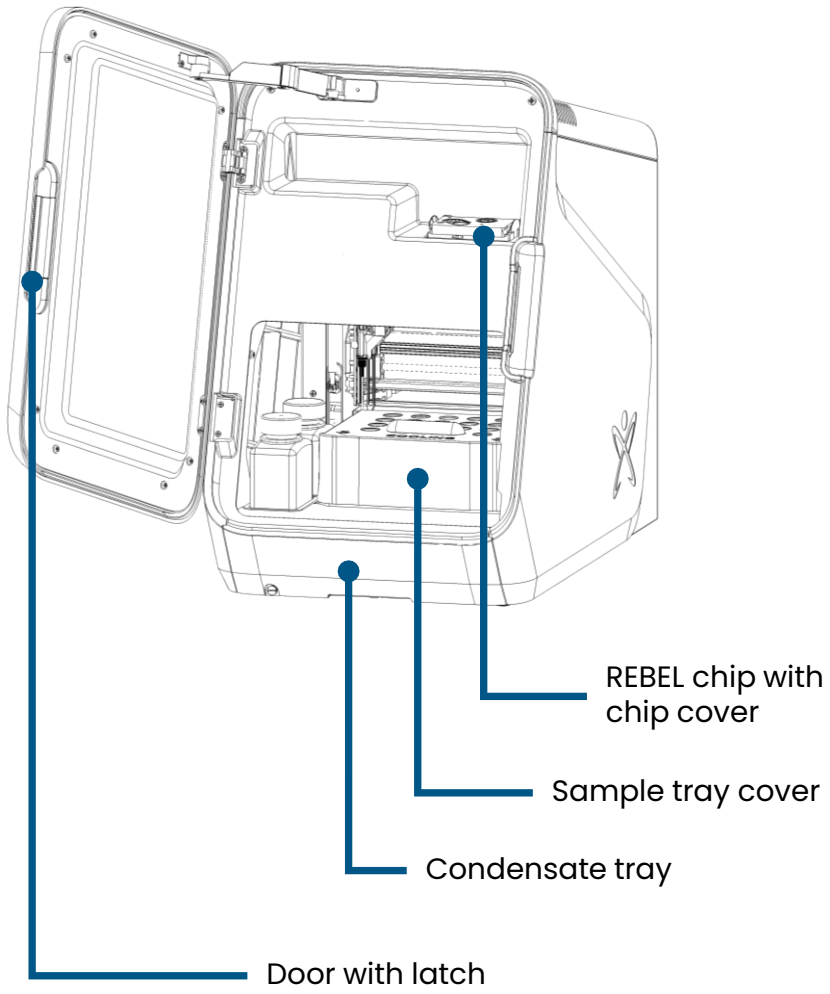
PATsmart™ REBEL® System

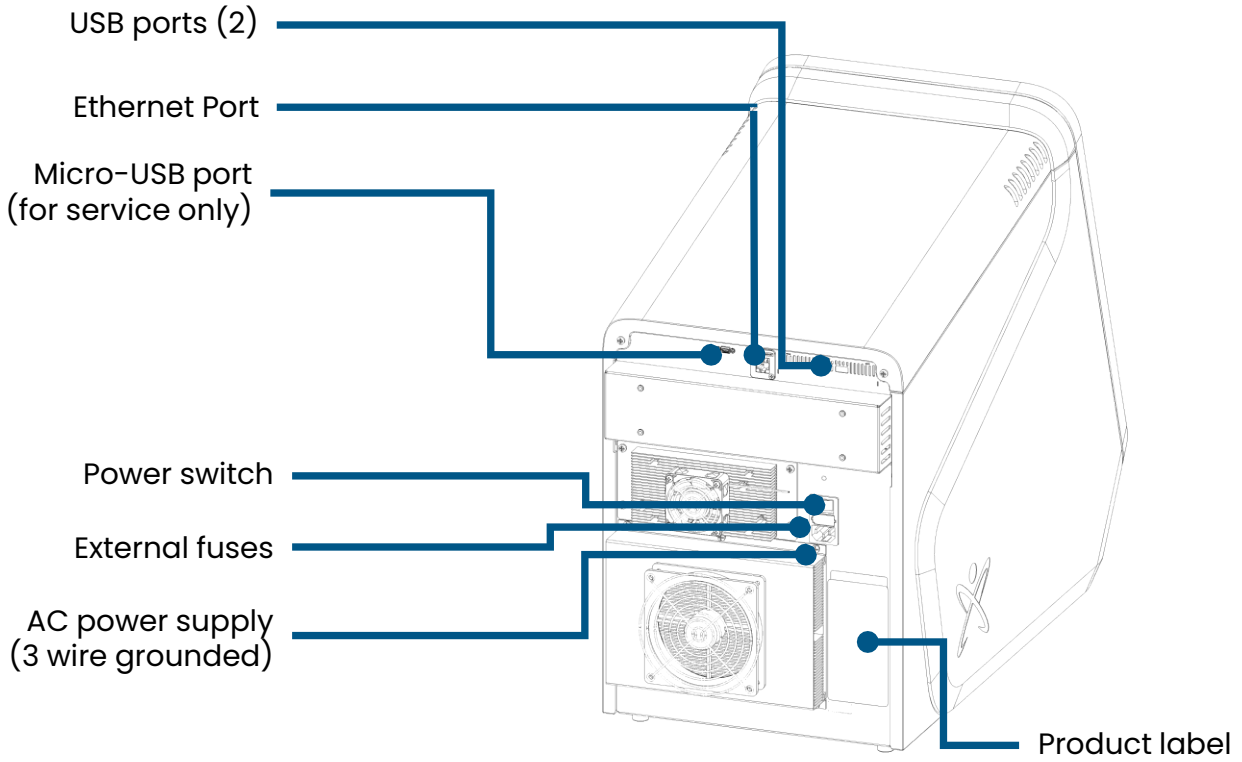
Essentials Guide

Software Version 1.3

26 Nov 2025

Anatomy



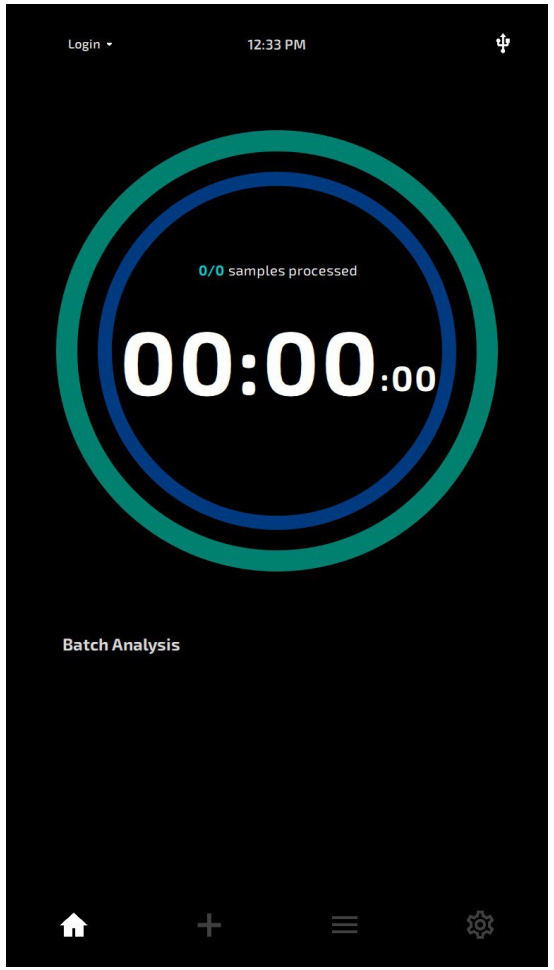


Important

- ✓ Ensure that all vents are free from obstruction due to the large volume of air the device pulls in during normal operation. A minimum of 2 inches (5.1 cm) behind the device and 6 inches (15.2 cm) above the device are recommended.
- ✓ Depending on your laboratory conditions, you may have a laminar flow cabinet for your PATsmart™ REBEL® System setup. See details in the User Manual.
- ✓ REBEL should be placed on a secure table/bench or other flat level surface rated for the specified size and weight.

Boot Up & Dashboard

- Manually toggle REBEL power switch to ON
- Navigate to System Settings > User Accounts
- Login as existing user or create a new user



Home
View progress of samples in a batch analysis

Run Setup
Import batch sheet, edit sample parameters, & start run

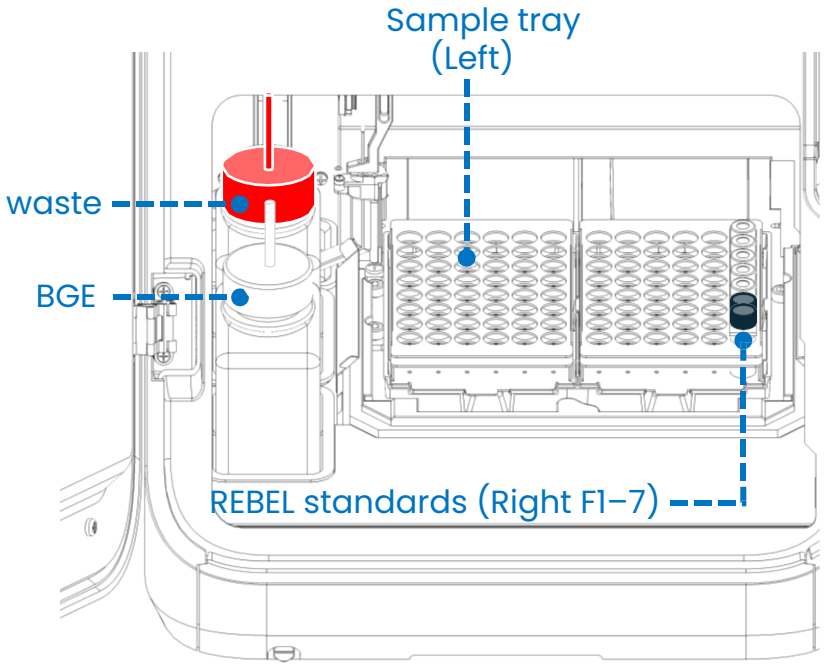
Timeline
View queue in progress and quant result history

System Settings
Start & shutdown REBEL and edit settings

Load Consumables

1. Load REBEL standards into F1–F7 in right vial holder with blue capped vials in F1–F2.
2. Confirm dip tube and red cap are attached to waste bottle in rear position as shown.
3. Remove BGE cap. Attach dip tube and cap, ensuring dip tube is fully submerged in

   REBEL BGE solution. Load into front position as shown.
4. Use REBEL Diluent to dilute samples and load into vial in tray or 96 well plate. Load into left tray position and replace sample tray cover.
5. Follow on-screen prompts to run a Quantitative Calibration cycle after installing a new set of standards.

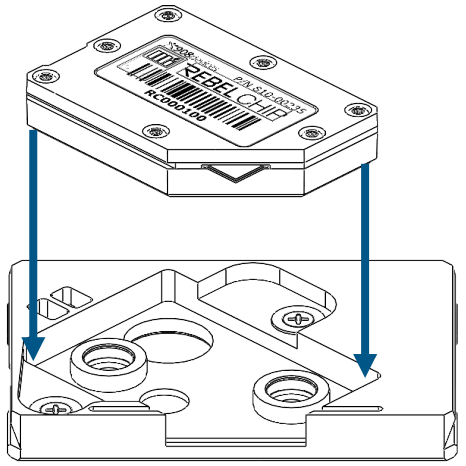


Important

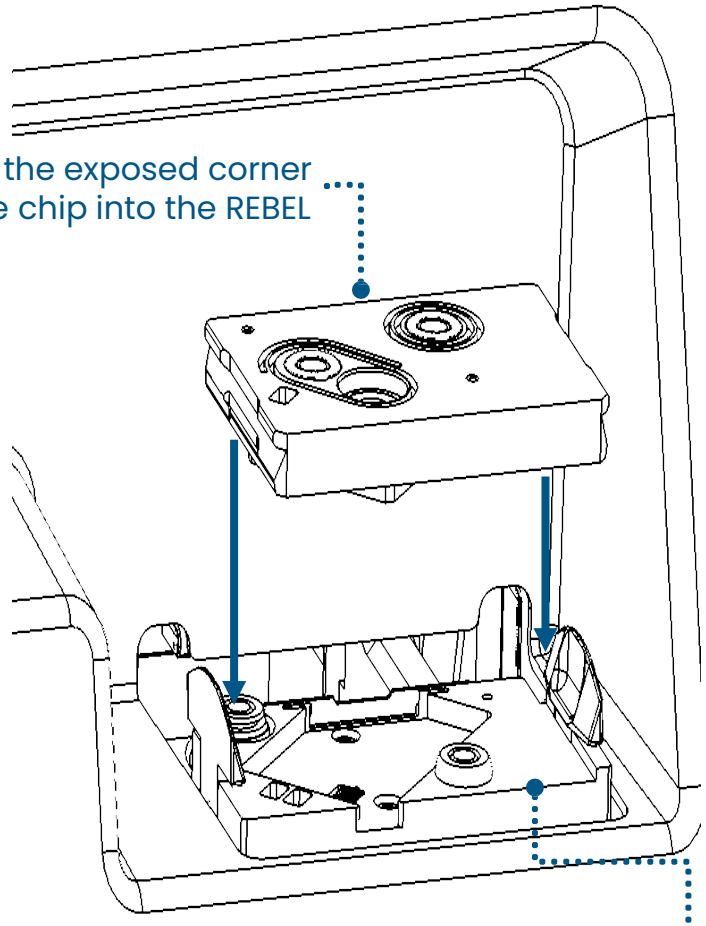
- Refrigerate REBEL standards (ideal temperature range 2–8°C) vials until use. Do not freeze.
- Once pierced, standards expire after 14 days.
- Once in use in REBEL, BGE and Diluent expire after 30 days.
- Refer to unique expiration dates on the standards pouch and bottles in kit.
- Solvents in Diluent and Background Electrolyte (BGE) are volatile—cap bottles when not in use.

Load the REBEL Chip

1. While wearing gloves, remove chip from foil pouch
2. Hold the chip cover bottom-up with screw heads visible.
3. Seat the chip (barcode up) into the matching recess until flush.
4. Flip assembly over with barcode down.
5. Carefully clip assembly into REBEL chip carrier— it must click in flush on two sides.
6. Run Quantitative Calibration (see next page)



Chip assembly =
REBEL chip + chip cover

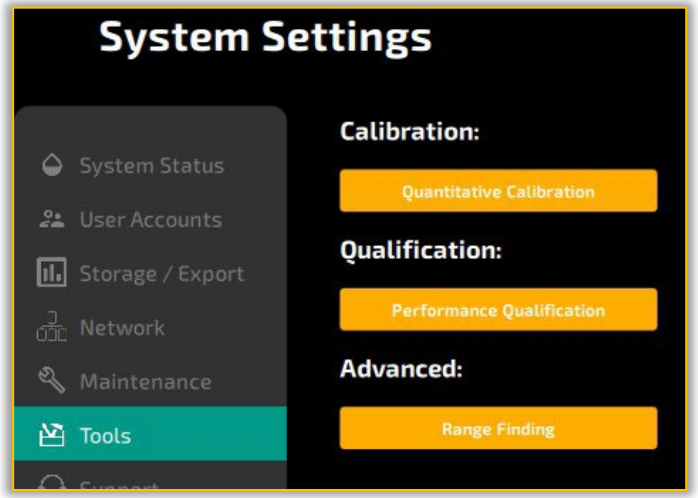


Best Practices

- ✓ Always wear gloves when handling REBEL chips
- ✓ Avoid bumping the exposed glass corner of chip and ensure there is no damage to the glass before using
- ✓ Ensure wells are empty before flipping chip
- ✓ Confirm sealing rings on chip cover are clean & dry

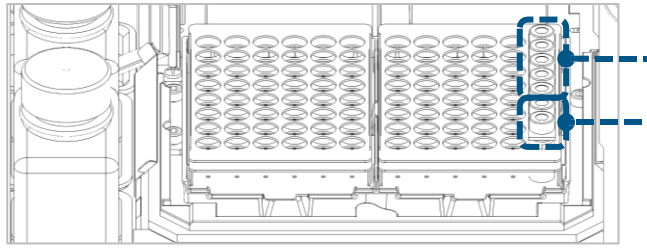
Quantitative Calibration and Performance Qualification (PQ)

Navigation
- Select System Settings > Tools > Quantitative Calibration



When to run a new Quantitative Calibration
- Required when using a fresh kit
- Recommended whenever the chip or standards vials are replaced, or when replacing the BGE bottle after several days of inactivity
- Recommended when PQ results repeatedly fail

Recommendations
- Review Quantitative Calibration and PQ reports in History with PASS/FAIL metrics
- If Quantitative Calibration does not complete or fails, contact your Field Applications Scientist or analytics-servicesales@repligen.com



About
- Quantitative Calibration regulates sensors for a new consumables kit and completes in about two hours. This process uses vials F3–7 (right tray).
- Performance Qualification (PQ) automatically makes a pass/fail check after every five samples; this confirms that your REBEL remains calibrated during analysis of a batch. PQ pulls from vials F1–2 (blue caps).

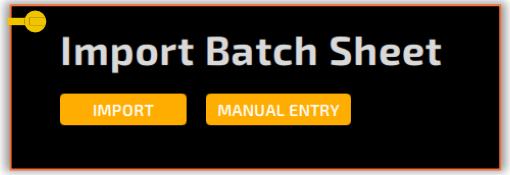
  To run a PQ manually, navigate to:
  System Settings > Tools > Performance Qualification

Set up a Batch

Are your samples diluted and ready for analysis?

Best option: Import

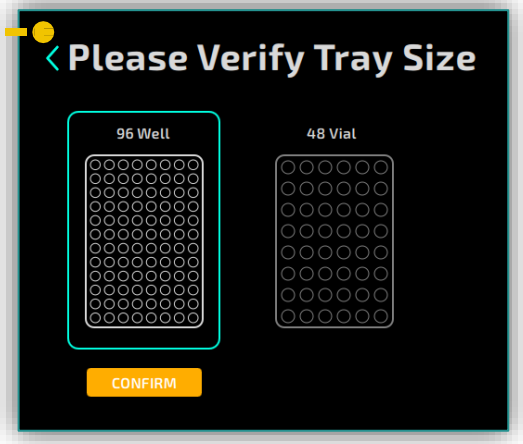
- Complete your batch sheet
- Select "+" then Import Runsheet
- Locate the batch sheet on network or USB, then press Select
- Place your vial tray or well plate in the left tray

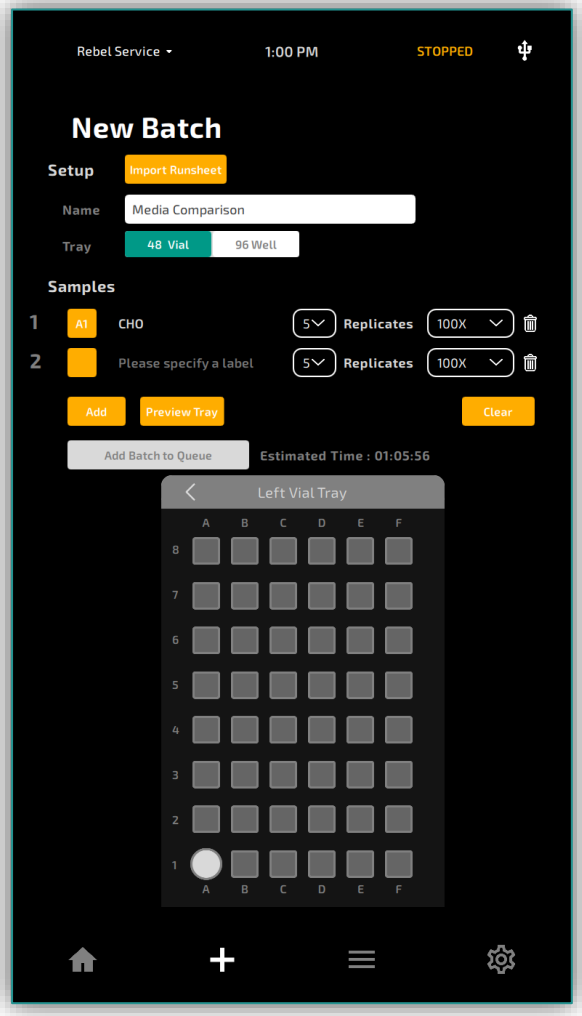


Manual option

For a single sample or small batches

- Confirm tray size, name your batch, and add sample information directly on screen
- Add each sample, then Add Batch to Queue





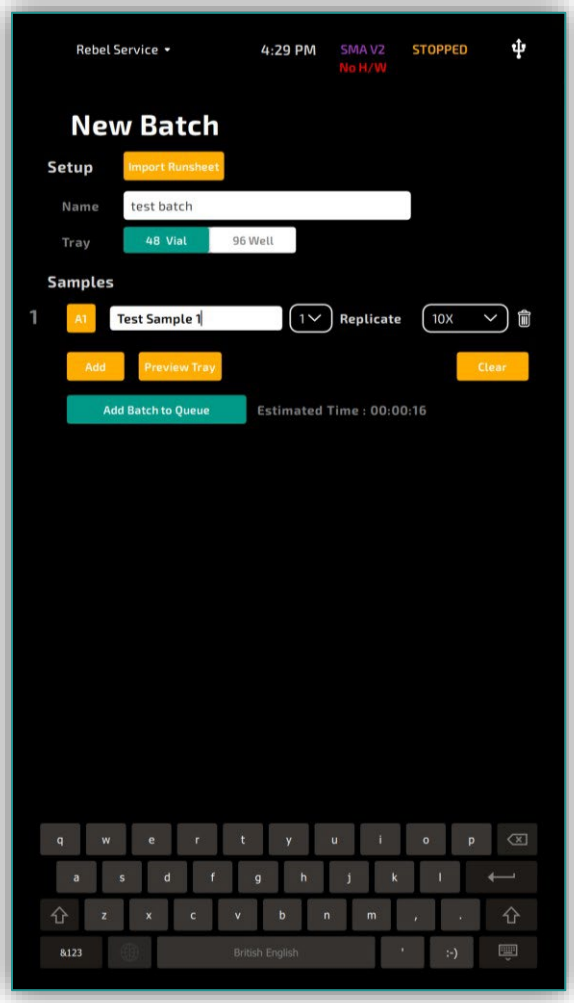
Review & Edit Sample Info

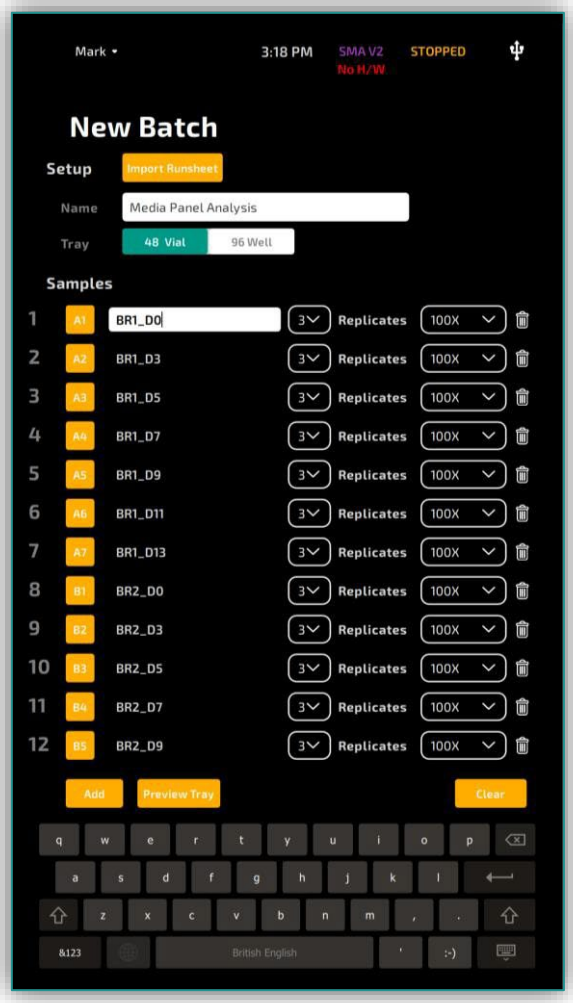
- Overview displays sample info for a selected batch
- To view or modify existing sample info or add a new sample, tap the desired area.

  Once selected, these options may be modified:
  - Sample Label
  - Comment
  - Dilution Factor
  - Replicates

  For an imported runsheet, these options may be modified:
  - Batch Name
  - Tray type
  - Sample location
  - Sample label
  - Replicates
  - Dilution factor

  Note that for imported runsheets, custom fields (such as “Comment”) cannot be modified via the touchscreen interface.
- Review in Batch Overview then select “Add Batch to Queue”

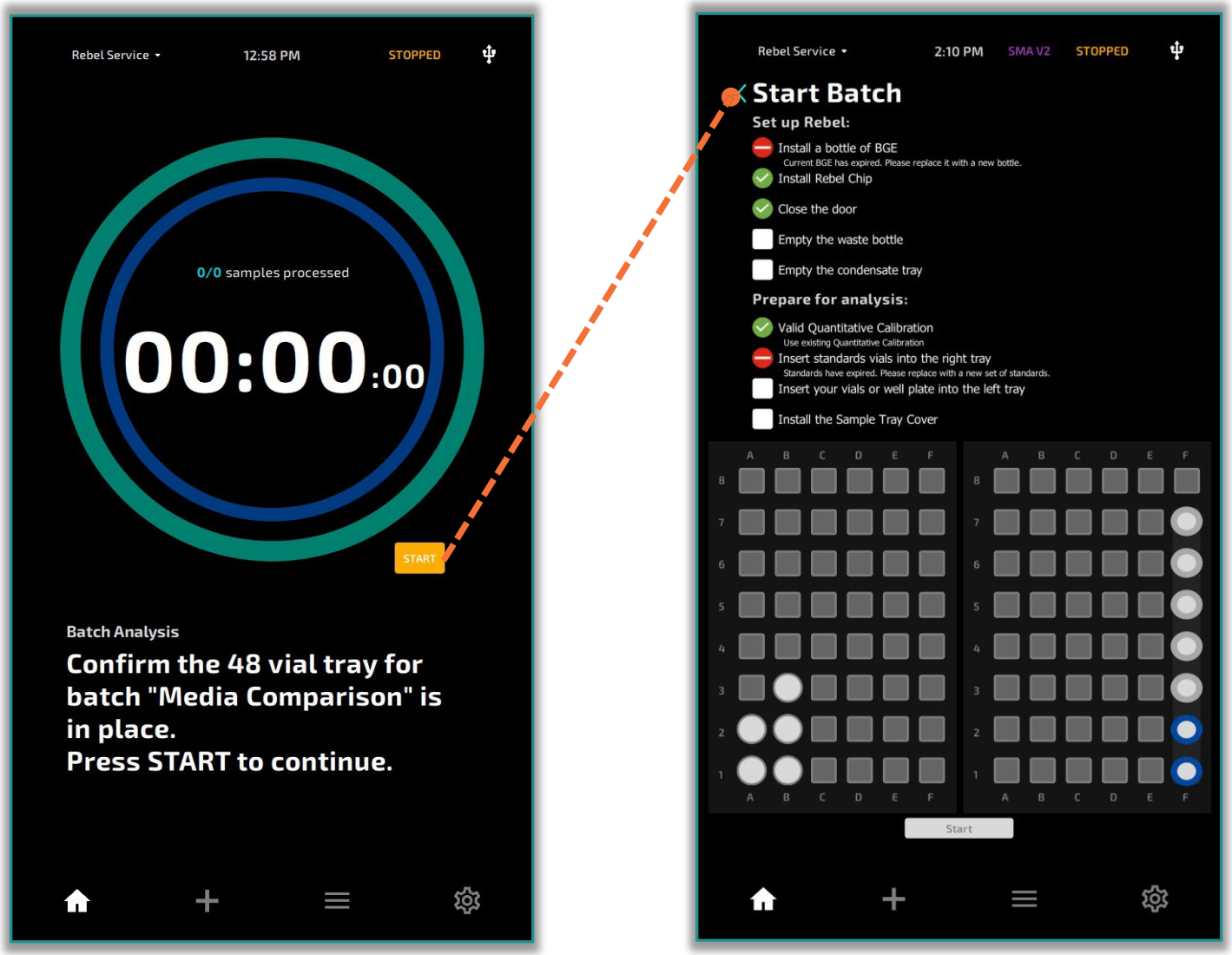




Start your run!

Press Start to bring up the batch initialization checklist. All checklist items must be completed before analysis begins.

- Some errors (⛔) are automatically confirmed by REBEL (✅) once the user resolves the issue
- Actions with square checkboxes (☐) must be manually confirmed by the user before continuing



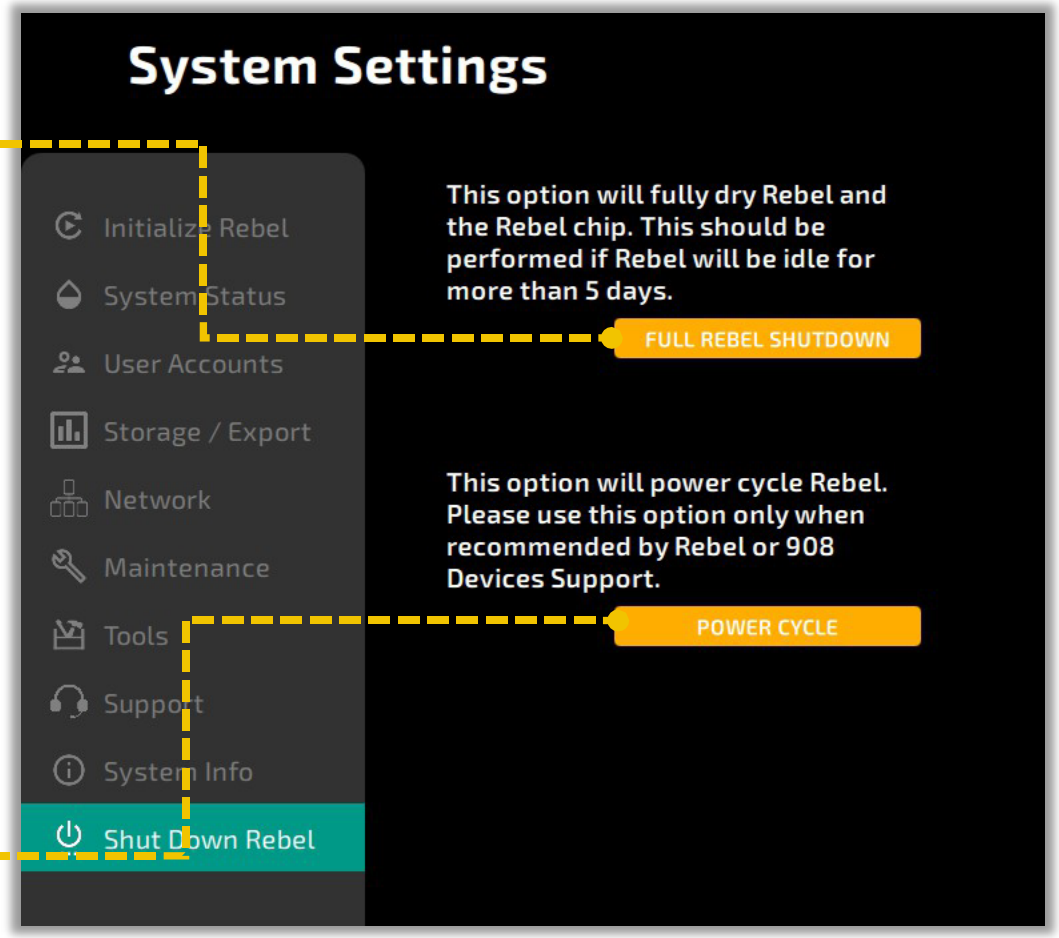
REBEL Shutdown

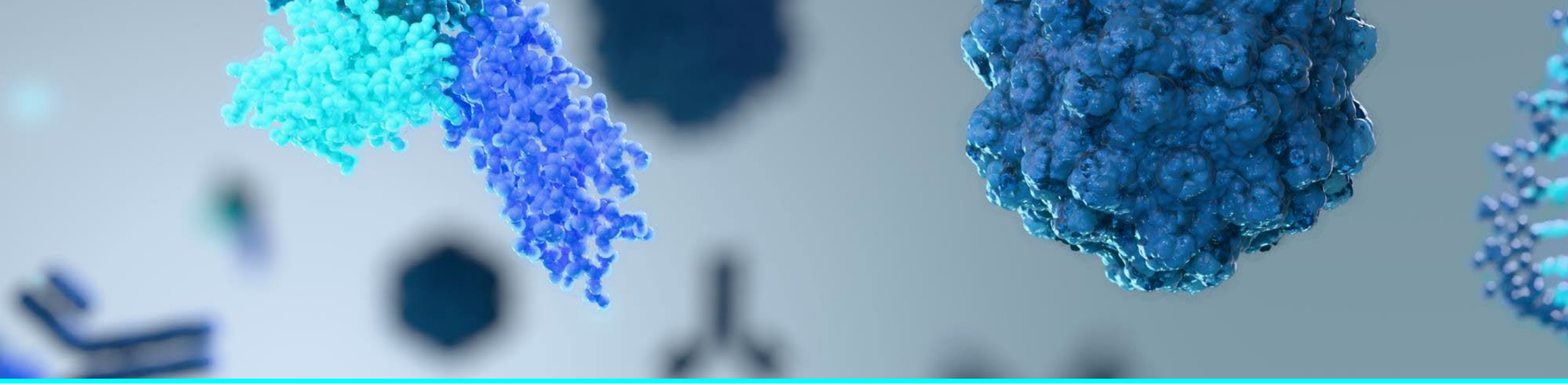
Navigate to System Settings > Shut Down REBEL

Full REBEL Shutdown should be performed if the REBEL will be idle for more than five days. Follow on-screen prompts to complete this 30-minute procedure to ensure proper function.

- Remove BGE and cap bottle
- Place empty bottle under BGE line for cleanliness during dry cycle
- Sample tray cooler will power down, so remove vials/plates from BOTH left & right trays and refrigerate.
- AFTER shutdown, empty waste bottle and condensate tray
- Manually toggle power switch OFF

Power Cycle should be used when prompted by the REBEL unit or Repligen Support.





Thank you

Technical Support | TechSupport@repligen.com

www.repligen.com

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