

Luminex[®] 200™ Quick Guide



For full details, reference the software manual

- 1. Turn on instrument - there are three power switches: 2 on the back of the instrument, one on the back of the SD pump**
 - a. Warm up takes 30 minutes
 - b. System will shut down the lasers after 4 hours of inactivity
 - 2. Turn on computer**
 - 3. Open xPonent[®] software**
 - 4. Adjust probe height to 96-well plate**
 - a. Go to Maintenance > Probe & Heater
 - b. Use 2 disc in 96-well plate
 - 5. Run enhanced startup routine**
 - a. Maintenance > Cmds & Routines > Daily Instrument Startup (dropdown menu)
 - b. Fill 96-well plate or Automatic Maintenance Plate with appropriate reagents
 - i. diH₂O
 - ii. 70% EtOH
- NOTE:** Startup Routine takes less than 10 minutes
- 6. If needed, run calibration and verification**
 - a. Go to Maintenance > Auto Maint > System Initialization
 - b. Warm reagents to room temperature
 - c. Vortex vigorously before dropping into strip wells
 - d. 5 drops per reagent

NOTE: Full calibration/verification takes approximately 20 minutes

7. Create protocol

- a. SETTINGS / STEP 1:
 - i. Follow instrument setting instructions in assay protocol for sample volume, bead type and gates
 - ii. Volume: This is how much of the sample/well will be aspirated
 - iii. Analysis Type: Quantitative Protocol
 - iv. Enter number of standards (do not include the blank)
 - v. Unless required in the PDF result file, leave controls as zero
- b. ANALYTES / STEP 2:
 - i. Select Bead Regions
 - ii. Name analytes
 - iii. Count = 50
 - iv. Units = pg/mL
 - v. Click Apply All
- c. PLATE LAYOUT / STEP 3:
 - i. Change Replicate Count
 - ii. Assign Background and Standards - this can be changed in the batch

NOTE: All users can share a protocol if running the exact same analytes and bead regions

8. Create standard curve for protocol

- a. Go to Protocols Tab > Stds & Ctrl's > Create New Std/Ctrl Lots
- b. Choose protocol from drop-down menu
- c. Enter highest concentration
 - i. This information is on the Certificate of Analysis or Standard Value Card
- d. Enter dilution as a whole number
 - i. Not sample dilution! Dilution factor of the standard curve.
- e. Highlight and Apply All using arrows

9. Create batch

- a. Select Protocol
- b. Associate Std Curve
- c. Assign Unknown Sample Wells
- d. Program any options specific to your batch
 - i. Add multiple plates
- e. Name Samples (optional)
 - i. Can Import List – comma delineated list of Sample ID and Dilution Factor
- f. Add Sample Dilution Factor
 - i. If you add sample names after sample dilution factor, you will need to add sample dilution factor again

10. Results

- a. Go to Results > Saved Batches > Select Batch to Analyze
- b. Check box for all analytes
- c. Generate report
- d. SAVE AS .PDF: Save All Button
- e. SAVE AS EXCEL: Save Button for each different analyte

11. System shutdown

- a. Remove Assay Plate and replace with Automatic Maintenance Plate
- b. Go to Maintenance > Auto Maint > Shutdown
- c. Fill Automatic Maintenance Plate with appropriate reagents and run Shutdown.
- d. Remove Automatic Maintenance Plate, empty it, and replace it in the instrument.
- e. Exit xPonent software and shut down the instrument and computer.

NOTE: System shutdown takes approximately 5 minutes

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