

# FLEXMAP 3D<sup>®</sup> Customer Fact Sheet

## Welcome!

Thank you for your continued investment in Luminex. To aid your efforts, below are some tips and information that may help with successful operation of the product.

## **Commonly Ordered Parts and Accessories**

Accessories	
Description	Part Number
Heater Block for 96-Well Microtiter Plate	CN-0224-01
Heater Block for 384-Well Microtiter Plate	CN-0223-01
Sample Needle Height Alignment Kit	CN-0015-01
96-/384-Well Plate Probe Height Adjustment Tool	CN-0298-01
RUO*	
Description	Part Number
Calibration Kit	F3D-CAL-K25
Verification Kit	F3D-PVER-K25
Sheath Fluid Concentrate	40-50018
Sheath Fluid	40-50015
Sheath Concentrate PLUS	Coming Soon
Sheath Fluid PLUS	40-50021
IVD**	
Description	Part Number
Calibration Kit	F3DIVD-CAL-K25
Verification Kit	F3DIVD-PVER-K25
Sheath Fluid Concentrate	40-75680
Sheath Fluid	40-50000
Sheath Concentrate PLUS	Coming Soon
Sheath Fluid PLUS	Coming Soon
Spare Parts	
Description	Part Number
Syringe, 500 mL with Seal	CN-0013-01
Sample Probe Needle	CN-0221-01
Off-Plate Reagent Block	CN-0225-01
Off-Plate Reagent Block Fuse (6 AMP)	CN-0225-01 CN-0226-01
Off-Plate Reagent Block Fuse (6 AMP) 6 Month PM Kit (FM3D, Increased Throughput)	CN-0225-01 CN-0226-01 CN-0215-01



**Contact Luminex for pricing information.** 

# **Calibration and Verification Failure Causes**

## CAL1 and CAL2

- Incorrect target values
- Not enough drops were dispensed
- Incorrect wells selected
- Expired or improperly stored sheath fluid or reagents
- Improperly diluted 20x sheath concentrate
- Probe height adjusted incorrectly
- Clogged probe or cuvette
- Use of other reagent in place of sheath fluid
- Waste container full or overfilled
- Instrument idle for long period of time without proper cleaning

## VER 1 and VER 2

- Incorrect target values
- Not enough drops were dispensed
- Incorrect wells selected
- Expired or improperly stored sheath fluid or reagents
- Improperly diluted 20x sheath concentrate
- Probe height adjusted incorrectly
- Clogged probe or cuvette
- Waste container full or overfilled
- Failing MFI could indicate instrument needs cleaning

## FL1 and FL2

- Not enough drops were dispensed
- Incorrect wells selected
- Probe height adjusted incorrectly
- Clogged probe or cuvette
- Internal component could be malfunctioning



FLEXMAP 3D<sup>®</sup> Calibration Kit



FLEXMAP 3D Performance Verification Kit

# **Stringent Cleaning**

If you are experiencing the following issues, please reference the stringent cleaning process.

- Low or no bead counts
- Slow events
- Calibration failure
- Dripping probe
- Bead shift
- Sample empty error
- Air in the syringe
- · Clog or probe height set incorrectly

#### **Stringent Cleaning Process**

- 1. Remove and sonicate the probe for two to three minutes. Using a syringe, flush the sample probe with distilled water from the narrow end through the larger end.
- 2. Replace the probe and readjust the probe height.
- 3. Fill the reservoir with 0.1 N NaOH and run **Sanitize** twice (if NaOH is not available, substitute with 10% to 20% bleach).
- 4. Empty the reservoir and fill with 10% to 20% bleach. Run Sanitize twice.
- 5. Run Backflush, Drain, Backflush, Drain, Backflush, Drain, 2x Alcohol Flush, and 3x Wash with distilled water.
- 6. Recalibrate the system. You should see an average of 250 events per second.

The training video for this procedure is available by clicking on the link: FLEXMAP 3D

## **Adjusting Your Sample Probe**

Adjusting your probe height is important. You should adjust the sample probe vertical height each time you change the type or style of your microtiter plate.

#### Procedure

- 1. On the Home page, click Probe and Heater under Daily Activities. The Probe & Heater tab opens.
- 2. Based on the type of plate you are using, you may have to place an alignment disk or sphere in the well:
  - a. Filter-bottom plate: 1 disk
  - b. Mylar-bottom plate: 1 disk
  - c. V-bottom (conical) plate: sphere
  - d. Flat-bottom plate: no disks or spheres
  - e. Round-bottom plate: no disks or spheres
  - f. **96-well Hard Bottom Plates:** No disk is required. Ensure that the well location is selected on the plate image. Luminex recommends the use of well D6 (a green pin marks the location). To change the well location, click on the desired well in the plate image.
  - g. **96-well Filter or Mylar Bottom Plate:** Place one (5.08) alignment disk into a well. Ensure that the well location is selected on the plate image. Luminex recommends using well D6 for 96-well plates.
  - h. **384-well Filter or Mylar Plate:** Use the Probe Height Adjustment Tool.

#### NOTE:

Alignment disks and spheres are included in the Sample Probe Height Adjustment Kit (CN-0263-01) shipped with the instrument. Likewise, the Probe Height Adjustment Tool (CN-0298-01) is also shipped with the instrument.

- 3. Verify that the microtiter is not warped. Warped plates can lead to incorrect probe height adjustment.
- 4. Click Eject to eject the plate carrier.
- 5. Place the plate on the plate holder with A1 in the top left corner. Place the off-plate reagent block on the plate carrier. Place a well-strip (provided with the Calibration and the Performance Verification kits) in column S1 of the block.
- 6. Click Retract to retract the plate carrier.
- 7. Type a name for the plate in the Plate Name box, or select a saved plate from the Plate Name list.
- 8. In the Plate section, click D6 for the 96-well plate.
- 9. In the Reservoir section, click RB1.
- 10. In the Strip-Wells section, click SD1.
- 11. Click Auto Adjust Height. The probe automatically adjusts itself and saves it to the plate you selected.

#### NOTES:

- If using a strip-well plate, ensure that a strip is present in the selected well location, prior to calibration.
- Make sure there is no liquid in the plate or the offplate reagent block.
- If a saved plate is selected, the results of the new calibration will override the previous calibration.

## **Obtaining Your License Key**

- Find the serial number located on the back of your instrument. To locate through your software, click on Maintenance > System Info.
- 2. Locate the expired trial license key. (Example: ABC12-DEF34-GHI56-JKL78-MNO91-PQR01-STU23)

Contact Luminex Support with both serial number and key at **support@luminexcorp.com** or by calling (877) 785-2323.

#### Applying Your New License Key

- 1. Go to the **Admin** page of the software.
- 2. Select **Licensing** from the left hand menu.
- 3. Click the **License** button at the bottom right corner of the screen.
- 4. Copy and paste this key into the License Code field (the License File field will remain blank).

If you have any issues with the new license, please contact Luminex Support at **support@luminexcorp.com** or by calling (877) 785-2323.

#### Don't forget to visit the Luminex Customer Center online at www.luminexcorp.com.

The Luminex Customer Center is a great resource for:

- Knowledge articles
- Viewing order history
- Creating a case
- Checking order status
- Viewing videos for troubleshooting
- Registering and completing training

#### Visit our website and follow the steps below to get started:

- Hover over the Customer Center tab
- Click on Self-help Center
- Click Register



## Please print out a copy and keep next to your instrument for quick reference.



## For additional support, please visit: www.luminexcorp.com

\*For Research Use Only. Not for use in diagnostic procedures.

\*\*For In Vitro Diagnostic Use. Products are region specific and may not be approved in some countries/regions.

Please contact Luminex at support@luminexcorp.com to obtain the appropriate product information for your country of residence. The FLEXMAP 3D system is a class 1(I) laser product.

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