

xMAP INTELLIFLEX® V2.0 FAQ



Plate Configuration and Acquisition

1. How does xMAP INTELLIFLEX® use standard, control, and background well designations?

xMAP INTELLIFLEX Software V2.0 uses background wells to calculate net MFIs. Standards and controls are not used for on-instrument data analysis, but you can designate these well types and export data in the xPONENT® file format to use them in off-instrument xMAP® data analysis software.

2. Can the internal barcode scanner be used to upload sample IDs?

No. The internal barcode scanner can not scan sample IDs. The internal barcode scanner may only be used to import calibration and verification target values.

3. Is there a method to change the minimum count for all analytes in a panel at the same time?

The current xMAP INTELLIFLEX Software interface does not have a method to change the count for all analytes in a panel through a single action, but the software allows you to define panels in a CSV file and easily import this content. At this time, importing a panel is the fastest and easiest way to define large or complex panels.

4. Which operation modes are available on the base model vs. DR-SE model?

xMAP INTELLIFLEX® Operating Modes	Compatible Instrument		RP2 Enabled	Laser Power	PMT	EDR APD	MFI Value Calculation	Dynamic Range RP1 (logs)	Dynamic Range RP2 (logs)
	Standard	DR-SE							
High Sensitivity	Yes	Yes	No	High	Standard	Enabled	EDR Signal	≥5.5	-
Dual Reporter	No	Yes	Yes	Standard	Standard	Not Enabled	PMT Signal	≥4.5	≥4.5
Luminex® 200™ Low PMT	Yes	Yes	No	Standard	Standard	Not Enabled	PMT Signal	≥4.5	-
Luminex® 200™ High PMT	Yes	Yes	No	Standard	High	Not Enabled	PMT Signal	≥4.5	-
FLEXMAP 3D® Low PMT	Yes	Yes	No	Standard	Standard	Not Enabled	PMT Signal x 1.7	≥4.5	-
FLEXMAP 3D® High PMT	Yes	Yes	No	Standard	High	Not Enabled	PMT Signal x 1.7	≥4.5	-

5. What are the differences in xMAP INTELLIFLEX operating modes (high-sensitivity vs. Luminex® 200™ vs. FLEXMAP 3D)?

Please refer to the "Define the Acquisition Settings" topic in of the [User Manual](#) for descriptions of the different modes to determine which one is best for your application.

6. Do you have recommendations on gate settings?

We do not have recommended gate settings for the instrument. If you are developing your own assays, you should optimize and validate gate settings based on your application or assay chemistry. The default gating is set to 7,000-17,000; any changes made to these values will persist until manually changed again.

Running a Plate

7. Is it possible to override or shorten the laser warming time?

While you cannot bypass the laser warmup time, you can choose to run a plate before the warmup completes. You will be presented with a “warmup not complete” message and can choose to proceed. In your results file, the system will note that the plate was acquired while in a non-warmed up state.

8. Is it possible to halt an ongoing plate run, perform additional system cleaning, and resume the run? Can you re-acquire specific wells?

Yes, xMAP INTELLIFLEX supports this workflow.

9. What are the different options for the “well status” column?

There are eight possible values for the “well status” column:

Color	Action	Explanation
Blue	Pending	Instrument has not yet attempted to read the well.
Purple	Aspirating	Sample collection has started.
	Reading	Sample is being interrogated.
N/A	Acquired	Sample interrogation is complete. This status is normally displayed too briefly to be observed.
Green	Complete*	Well successfully read.
Yellow	Warning*	Well failed to reach minimum bead count.
Red	Failed*	System failure occurred during the acquisition process.
	Dry*	No liquid detected in the well.

10. Is there a method to replay previously acquired data, recalculating results with different DD gate settings, different panel selections, and/or different plate layouts (e.g., differing selections of replicate wells)?

Yes, V2.0 introduced the ability to reanalyze previously acquired data sets. See the xMAP INTELLIFLEX manual for more information.

11. Can I rerun batches without typing everything anew?

There is not an option to copy data from a completed previous plate to reuse again. A new plate would need to be created/imported. If there was an error during acquisition and the plate is in “partial” status, you can resume the plate.

Note: Plate configurations, panels, and acquisition settings may be saved individually or as a protocol for repeated use.

12. Is there a time difference between running the plate vertically versus horizontally?

Plate run time can be impacted by many different variables, however, there is no significant difference in run time when only comparing vertical versus horizontal plate layouts.

Results

13. Is there a method to export Dual Reporter data in the xPONENT®-format, such that the names of each file include the ‘RP1’ or ‘RP2’ designation?

Yes, the xMAP INTELLIFLEX V2.0 Software exports both files in a single action and appends the “_RP1” or “_RP2” as appropriate.

14. In what file formats is Dual Reporter data available and how may it be analyzed?

The new, customizable xMAP INTELLIFLEX file format supports Dual Reporter data within a single file.

Alternately, users may export data in the xPONENT file format. When Dual Reporter data is exported in this file format, separate “RP1” and “RP2” files will be produced, with one file for values from each reporter channel.

See xMAP INTELLIFLEX Software: Streamlining Quantitative Data Analysis at luminoxcorp.com/INTELLIFLEX/#documentation for additional information on file compatibility with external analysis tools.

15. Is it possible to retrieve the bead map and DD gates?

Yes, with V2.0, users can now view the bead map and DD gate settings for previously acquired plates. See the View Plate Version History section in the xMAP INTELLIFLEX [User Manual](#) for more information.

Applications

16. Do any bead regions have difficulties with classification?

All regions have passed internal QC parameters, including classification and misclassification, to ensure consistent performance across all instruments. If you are experiencing issues with specific regions, please contact Luminex Technical Support for further assistance.

17. Do you have data on bead performance using xMAP INTELLIFLEX?

Our validation data is internal-only, however our testing encompassed all three microsphere types (MicroPlex®, MagPlex®, and SeroMap®), a range of aged products, several lots of products, and parameters across all 500 regions. In our testing, all microsphere products passed classification and misclassification acceptance criteria.

Hardware

18. Do the xMAP INTELLIFLEX® RUO and xMAP INTELLIFLEX® DR- SE models both come delivered with a keyboard and mouse?

Yes, these accessories are included with the purchase. Please see the “Hardware Components” section of the [Instrument Manual](#).

19. Are there any differences in the touchscreen response for nitrile versus latex gloves?

Our internal testing included nitrile gloves only and showed the touchscreen performed as expected.

20. Can I upgrade my standard xMAP INTELLIFLEX (single reporter) to an xMAP INTELLIFLEX DR-SE?

No, it is not possible to convert the single reporter xMAP INTELLIFLEX to a dual reporter system.

Maintenance

21. Can this instrument be used with the solid probe height adjustment tool used on FM3D?

No, the well locations used for probe height adjustment may not be changed, so the solid probe height adjustment tool is not compatible. Please refer to page 32 of the [User Manual](#) for probe height calibration guidance.

22. Can you use liquid to adjust the probe height instead of the tool for 96- and 384-well mylar plates?

This has not been validated and cannot be recommended at this time.

23. Are there alternate methods to import calibration and verification target values besides the internal barcode scanner?

xMAP INTELLIFLEX calibration and verification target values may only be entered by scanning with the internal barcode scanner: there is not a method to import a file or manually type in values. If the barcode provided with the Calibration and Performance Verification Kit cannot be scanned, additional per-lot barcodes are accessible at: luminexcorp.com/INTELLIFLEX/#training-support.

24. What file format does calibration, verification, and fluidics data get exported as?

Calibration, verification, and fluidics results are exportable as XLS files. Contact Luminex Technical Support with questions related to use of this information.

25. Why is the fluidics routine “as needed” and not required anymore as part of the verification routine?

Although still recommended, the fluidics routine is now “as needed” to provide increased maintenance flexibility depending on your application(s).

Additionally, the two routines test different aspects of the instrument. Verification ensures the optical integrity of the system, while fluidics detects well-to-well carryover. The two processes were decoupled because a ‘failure’ in fluidics does not impact a successful verification.

You can now troubleshoot fluidics failures independently and without the need to rerun a successful verification.

26. Is it possible to run daily maintenance/cleaning without warming up the laser?

Yes, any of the following maintenance commands and routines do not require the use of a laser and can be completed when the lasers are not warm:

Alcohol Flush	Drain	Prime	Sanitize
Backflush	Prepare for Storage	Remove Air Bubbles	Soak
Daily Shutdown	Weekly Maintenance	Remove Clog	
Daily Startup	Wash	Revive After Storage	

27. Can xMAP INTELLIFLEX users create and/or save custom maintenance routines?

No, the software includes a number of pre-defined maintenance routines. You may perform additional, individual cleaning commands (such as Wash or Sanitize commands), but currently, there is not a way to aggregate multiple commands into a single routine. Please see the [User Manual](#) for recommendations on system maintenance.

28. What is the recommended procedure for completely shutting down the instrument?

Please follow the “Shut Down the System” instructions in the [User Manual](#).

29. How many plates does a single box of sheath fluid process? Is there a general guideline for this?

The amount of sheath used per plate depends on several variables. We’ve estimated the approximate amount of sheath that each function uses for common applications:

i. Weekly maintenance	~550 mL
ii. Daily startup	~60 mL
iii. Alcohol flush	~20 mL
iv. Backflush	~150 mL
v. Drain	~5 mL
vi. Prime	~1.5 mL
vii. Remove air bubbles	~570 mL
viii. Remove clog	~300 mL
ix. Daily shut down	~70 mL
x. Calibration and verification	~120 mL

A general estimate for a 96-well plate is 1 L, so a 20 L box should process about 20 plates.

30. Can the system undergo a H₂O₂ disinfection routine (gassing the room with the equipment in it)?

We have not tested this; the impact of H₂O₂ disinfection has not been studied yet.

31. How frequently should the syringe be replaced if the instrument is not used heavily? Is it always six months?

We recommend following maintenance routines at the same cadence for all instruments, regardless of frequency of use.

32. Do you have pointers for preventing damage to the instrument?

Typical workflows do not lead to instrument damage. However, always refer to the [User Manual](#) to determine which maintenance steps require completely powering off and unplugging the instrument.

There is low chance of major damage caused by any routine maintenance but take care to ensure that all connections you disconnect to perform maintenance routines are properly reconnected before use.

Service

33. How long are instrument parts (e.g., the laser box) under warranty? If the instrument has a one-year warranty and a laser fails in year two, is it covered, or would the instrument need to be replaced?

As a component of the system, the laser box carries the same 12-month warranty period as the instrument.

Due to the modular design of the instrument, our Field Service team can resolve the vast majority of issues, so instrument replacement is highly unlikely.

34. What would a laser box replacement cost?

If the instrument is still under warranty or is covered by a Platinum- or Gold-level service agreement, there is no cost to you.

If the instrument is covered by a Bronze service agreement, you would be responsible for travel and labor costs, as well as parts (with 20% off parts).

If the instrument is out of warranty and is not covered by a service contract, then you would be responsible for the cost of travel, labor, and parts.

Please contact Technical Support for a Field Service estimate.

35. Will white-glove delivery be necessary?

Yes, the instrument is too heavy for a Field Service Engineer to move alone. This service is automatically set up by Luminex for xMAP INTELLIFLEX drop-shipments.

If your system is shipped to you through a distributor/partner, the responsibility for setting up the white-glove service falls on the partner/distributor.

36. Is the system controllable remotely? Can a Field Services Engineer provide remote assistance?

No, the system is not currently set up for remote access.

Administrative

37. Does xMAP INTELLIFLEX support or require a network connection?

The system does not require a network connection, but you may choose to configure your system for use on a network to support file transfer operations.

Please see the xMAP INTELLIFLEX System Administrator Guide document for additional details.

38. Does xMAP INTELLIFLEX support regionalization?

The system does not support regionalization. Number formatting, date formatting, and similar elements use US English region settings. However, xMAP INTELLIFLEX Software does allow limited options to regionalize output data. Please see the xMAP INTELLIFLEX System Administrator Guidance document for additional details.

39. Does xMAP INTELLIFLEX support Windows Updates?

Yes. Please see the xMAP INTELLIFLEX System Administrator Guidance document for additional details.

40. What is the purpose of the Administrator login option?

The Admin login account is intended to support infrequent configuration tasks, such as setting the clock, configuring networking, changing the name of the PC, etc. The Admin account is not intended for day-to-day use of the instrument.

Please see the xMAP INTELLIFLEX System Administrator Guidance document for additional details about proper use of the Admin account.

41. Can auto-login be enabled?

Yes, auto-login is supported by xMAP INTELLIFLEX V2.0 Software. Please refer to the xMAP INTELLIFLEX System Administrator Guidance document for additional details.

42. Can the on-screen keyboard be disabled?

While a physical, USB keyboard is attached to the system, the on-screen keyboard will not appear when you use a mouse to select fields within the software. If you select fields by touch rather than by mouse, the on-screen keyboard will appear.

43. Can you connect to xMAP INTELLIFLEX by Bluetooth?

The system does not natively include Bluetooth support. The instrument includes a wired USB keyboard and mouse.

However, USB dongles that support Bluetooth or RF connection to a wireless device may work. We recommend that peripheral devices are capable of functioning as a USB human interface device (HID) using standard Microsoft® Windows® drivers, and do not require manual installation of additional software.

44. Is xMAP INTELLIFLEX Software installable on a standalone PC?

No, xMAP INTELLIFLEX Software is only intended for use on the xMAP INTELLIFLEX instrument itself and is not available for off-instrument use.

45. Is it possible to control the system from an external PC?

No, the system may only be controlled from the on-instrument software interface.

46. Can additional software be installed on the instrument?

See the xMAP INTELLIFLEX System Administrator Guidance document for details. You may choose to install additional applications (e.g., anti-virus software) for system security, but additional user interface software is not supported.

If you choose to install any additional software on the system, we recommend you validate that xMAP INTELLIFLEX continues to conform to your needs and be prepared to rollback changes if conflicts occur. Windows Defender software is enabled by default.

47. How will future software updates be applied?

Upgrading to V2.0 is expected to be the last software update to require Field Service Engineer support. Future software releases will be customer installable.



For more information, please visit luminexcorp.com/intelliflex/

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