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# xMAP INTELLIFLEX<sup>®</sup> 2.1 Software Installation Guide



**RUO**

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

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# Table of Contents

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Overview.....	1
Preparation .....	1
Materials Needed.....	2
Verifying Backup Media Properties .....	2
Formatting Backup Media .....	3
Obtaining the Software .....	3
Performing a System Backup.....	4
Installing the Software Upgrade .....	4
Confirming the Software Upgrade .....	5
Exporting a Support Package .....	6
Sending Files to Luminex Technical Support .....	6
Luminex Technical Support .....	7

## Overview

The xMAP INTELLIFLEX® v2.1 software introduces several new features to improve the user experience. For a complete list of changes, visit <https://diasorin.com/INTELLIFLEX/Changes>. In total, the installation process takes approximately 1 hour and 15 minutes to 3 hours to complete and can be performed without the onsite assistance of Luminex Field Service.

The overall process for installing the xMAP INTELLIFLEX v2.1 software includes:

Step	Hands on Time	System Run Time
1. Perform a V2.0 data backup	5 min	10 min - 1 hr
2. Obtain the software	15 min	0 min
3. Install the software	3 min	10 min
4. Perform a Laser Warm Up and Calibration/Verification	5 min	45 min
5. Perform a V2.1 data backup	5 min	10 min - 1 hr
Total	~35 min	~1hr 15min to 3hrs

## Preparation

Before performing the xMAP INTELLIFLEX® software upgrade, complete the following:

- Verify that the xMAP INTELLIFLEX Software version 2.0 is installed on the target instrument; this information may be obtained from the **SETTINGS > ABOUT** page.

**NOTE:** Upgrading the software from the xMAP INTELLIFLEX software v1.1 to the xMAP INTELLIFLEX software v2.1 is not supported.

- Ensure that the instrument is calibrated.
- Perform a system backup.
  - Restoring from backup is the only way to revert to a prior version of the software. Therefore, it is highly recommended to back up the system before performing the upgrade. The procedure to back up the system may be found in the *xMAP INTELLIFLEX System Administrators Guide* and is reproduced below, see **Error! Reference source not found.** Please consult your IT Administrator before proceeding.
- Prior to installing the xMAP INTELLIFLEX v2.1 software, consult your IT Administrator about any additional software installed on the xMAP INTELLIFLEX System that might interfere with the xMAP INTELLIFLEX v2.1 software installation.

# Materials Needed

- Administrator sign in credentials
- Medium (USB flash drive, external SSD, or network drive) for data backup storage. Backup size will vary based on system usage. The total system hard drive is 512GB, but less storage space may be needed. View the used space on the instrument C: drive to approximate the capacity required to perform the backup. See *Verifying Backup Media Properties*.  
**NOTE:** The backup medium (USB, external SSD, or network drive) must be formatted as NTFS. See *Verifying Backup Media Properties*.
- USB flash drive with a minimum of 1GB of available space for the xMAP INTELLIFLEX® software v2.1.

# Verifying Backup Media Properties

The xMAP INTELLIFLEX® System includes a custom integrated computer running Microsoft® Windows®. Microsoft® Windows® supports three different file systems (NTFS, FAT32, and exFAT) but currently uses NTFS as its primary file system. Therefore, the backup medium (USB flash drive, external SSD, or network drive) used to store the xMAP INTELLIFLEX System backup data must be formatted as NTFS. Confirm that the backup medium is formatted as NTFS before performing a system backup.

Additionally, there must be a sufficient amount of free space available on the backup medium to store the system backup. The amount of free space must be greater than the amount of used space on the instrument C: drive. Confirm that there is a sufficient amount of free space available on the backup medium before performing a system backup.

System Administrators may use the xMAP INTELLIFLEX Instrument to verify that a USB or external SSD is formatted as NTFS and contains a sufficient amount of free space. If the backup medium is not formatted as NTFS, refer to *Formatting Backup Media* or replace the backup medium with a USB, external SSD, or network drive that is formatted as NTFS. If the backup medium does not have enough free space available, replace the backup medium with a USB, external SSD, or network drive that has a sufficient amount of free space.

**NOTE:** Consult your IT Administrator for assistance verifying or formatting a network drive.

To identify the properties of a USB or external SSD:

1. Connect the USB or external SSD to the xMAP INTELLIFLEX Instrument.
2. Sign in to the xMAP INTELLIFLEX System as an Administrator.
3. Select  in the upper left-hand corner of the screen and select  to switch to Windows®.
4. Open **File Explorer > INTELLIFLEX**.
5. Locate **Windows (C:)** on the list of devices and drives.
6. Right **Windows (C:)** and select **Properties**. The **Windows (C:) Properties** dialog displays.
  - a. Locate the **Used space** line to check the amount of used space on the instrument C: drive.
  - b. Select **OK**.
7. Locate the USB or external SSD on the list of devices and drives.
8. Right click the USB or external SSD and select **Properties**. A dialog showing the device properties displays.
  - a. Locate the **File System** line and confirm that the file system is **NTFS**.
  - b. Locate the **Free space** line and confirm that there is a sufficient amount of storage available. The

- free space available must be greater than the amount of used space on the instrument C: drive.
- c. Select **OK**.

## Formatting Backup Media

The backup medium (USB flash drive, external SSD, or network drive) used to store the xMAP INTELLIFLEX® System backup data must be formatted as NTFS. See *Verifying Backup Media Properties* for additional information about file systems. System Administrators may use the xMAP INTELLIFLEX Instrument to format the USB or external SSD as NTFS.

**NOTE:** Consult your IT Administrator for assistance verifying or formatting a network drive.

**NOTE:** Formatting the USB or external SSD will erase **ALL** data stored on the USB or external SSD. Before formatting a USB or external SSD, save all data on the drive to a different location, if necessary.

To format a USB or external SSD:

1. Connect the USB or external SSD to the xMAP INTELLIFLEX Instrument.
2. Sign in to the xMAP INTELLIFLEX System as an Administrator.
3. Select  in the upper left-hand corner of the screen and select  to switch to Windows®.
4. Open **File Explorer > INTELLIFLEX**.
5. Locate the USB or external SSD on the list of devices and drives.
6. Right click the USB or external SSD and select **Format...** The **Format** dialog displays.
  - a. From the **File system** drop down menu, select **NTFS**.
  - b. Under **Format options**, select the check box next to **Quick Format**.
  - c. Select **Start**.
    - i. A warning message displays stating that formatting the drive will erase all data on the drive. Confirm that you have saved all data on the USB or external SSD to a different location, if necessary.
    - ii. Select **OK**, then wait for the formatting process to complete. Once the process is complete, a message displays stating that the formatting was completed successfully.
7. Select **OK** to close the **Format** dialog.
8. Right click the USB or external SSD and select **Eject** to safely eject the USB or external SSD from the xMAP INTELLIFLEX Instrument.

## Obtaining the Software

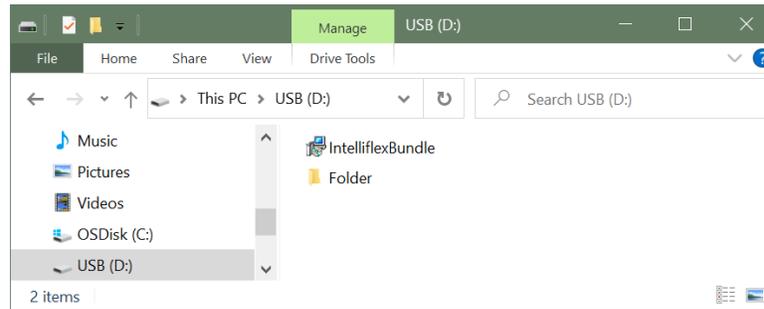
You can access the software in the download package through the web link provided by *Luminex Technical Support*. Alternatively, you may use the Luminex USB provided by *Luminex Technical Support*. The provided USB contains the necessary software from the download package.

If you are using the web link to perform the software installation, access the web link and transfer the **IntelliflexBundle.exe** file to a USB flash drive with at least 1GB of available space. Do not change the file name. The .exe file must be saved in the root directory of the USB, not in a folder. If the file is saved to a folder on the USB, the xMAP INTELLIFLEX® System will not recognize the file.

**NOTE:** The root directory is the top-level directory on a USB. The root directory is the location on the USB that is

visible prior to selecting a folder. See *Figure 1* below.

**Figure 1. Example of USB with IntelliflexBundle.exe**



## Performing a System Backup

This procedure is intended to be performed by a System Administrator. Please consult your System Administrator prior to proceeding.

The backup process may take 10 minutes to an hour, depending on the amount of data stored on the system and the type of drive used.

To back up the xMAP INTELLIFLEX® System:

1. Connect the USB or external SSD to the xMAP INTELLIFLEX Instrument, if necessary.

**NOTE:** The USB or external SSD must be in NTFS format. Refer to *Verifying Backup Media Properties*.

2. Sign in to the xMAP INTELLIFLEX System as an Administrator.
3. Select  in the upper left-hand corner of the screen and navigate to **SETTINGS > ABOUT**.
4. Select **Create Windows Backup Image**.
5. Select the appropriate USB, external SSD, or network drive and the desired folder for the backup.
6. Press **Select** to start the backup process. A message displays indicating the backup is in progress.
  - a. Select **Yes** in the **User Account Control** request, if necessary.

**NOTE:** The backup process runs in the command window. Closing the command window prematurely will show the INTELLIFLEX notification error: *Failed to create windows backup image, error code: -1073741510*. However, the backup process is still running and visible in task manager.

A message is recorded in the Notification center when the backup is complete.

## Installing the Software Upgrade

Only System Administrators can perform software updates.

**NOTE:** If your laboratory does not permit the use of USB flash drives in the laboratory, contact *Luminex Technical Support* for an alternative method to perform the upgrade.

To install the software upgrade:

1. Confirm the system is in idle state, is not currently running any maintenance or plates, and is not in an error state.

- a. To confirm the system is not in an error state:
  - i. Select the white arrow on the lower right side of the screen to expand the **System Dashboard**.
  - ii. Confirm the central icon is not red. If the central icon is red, as shown in *Figure 2*, contact *Luminex Technical Support* for further assistance.

**NOTE:** A red central icon indicates the system is in an error state. Proceeding with installation while the system is in an error state will render the xMAP INTELLIFLEX System inoperable.

**Figure 2. Example of Red Central Icon**



2. Connect the USB containing **IntelliflexBundle.exe** to the USB port on the target instrument.
3. Sign in to the xMAP INTELLIFLEX System with an Administrator account.
4. Select  in the upper left-hand corner of the screen and navigate to **SETTINGS > ABOUT**.
5. Select the **Luminex Software Update** button once.

- a. Select **Yes** in the **User Account Control** dialog, if necessary.
- b. The update location is automatically detected and a banner is displayed indicating that installation is in progress and the instrument will restart when complete.

**NOTE:** Do not interact with the xMAP INTELLIFLEX Instrument while the update is running to prevent the update from prematurely stopping. If the update does not complete in 20 minutes, contact *Luminex Technical Support* for further assistance.

6. After the instrument restarts, sign in to the xMAP INTELLIFLEX System with an Administrator account.
  - a. Review and accept the End-User License Agreement.
  - b. Navigate to **SETTINGS > ABOUT** and verify the software version appears as 2.1.

## Confirming the Software Upgrade

After completing the update:

1. Check the default acquisition settings by navigating to **PLATE CONFIGURATION > ACQUISITION**. If the **RUN** option for the **CLEAN ROUTINE** is enabled and the **REPEAT EVERY** field contains a value of zero, two options are available:
  - a. If no intra-well routine is needed, disable the **RUN** option.



- b. If the intra-well routine capability is needed, enter a valid **REPEAT EVERY** value greater than or equal to 1, for example:



2. Perform Calibration and Verification. Refer to Chapter 4 in the *xMAP INTELLIFLEX 2.1 User Manual*.
3. Export a support zip and send it to *Luminex Technical Support* to confirm the upgrade was completed successfully. Refer to *Exporting a Support Package* and *Sending Files to Luminex Technical Support*.
4. After confirming the upgrade completed successfully, restart the instrument.
5. Back up the system. Refer to *Performing a System Backup***Error! Reference source not found..**

## Exporting a Support Package

Support packages contain system information, which *Luminex Technical Support* uses to confirm the upgrade completed successfully. The SUPPORT ZIP page creates a support package (support zip) you can save locally, save to a USB , or email to *Luminex Technical Support*.

1. Connect a USB to the USB port on the front of the instrument, if necessary.
2. Select  in the upper left-hand corner of the screen and navigate to **SETTINGS > SUPPORT ZIP**.
3. Under **Export to**, select the check box next to **Local Folder**, **USB Drive**, or **Email to support team** to specify how you want to export the support package.
  - a. Under **Add a Note Describing the Issue**, include any additional information.
4. Select **EXPORT**.
5. Review the location of the exported zipped log files in the **Results** dialog box.
6. Select **CLOSE**.

## Sending Files to Luminex Technical Support

To send a support package (support zip) to *Luminex Technical Support*:

1. If needed, transfer the support zip to your computer.
2. Open the internet browser on your computer and navigate to [bft.luminexcorp.com](http://bft.luminexcorp.com) to access the **Luminex Big File Transfer** web page.
3. Enter your name in the **Your Name** field.
4. Enter your email in the **Your E-mail** field.
5. Enter [support@luminexcorp.com](mailto:support@luminexcorp.com) in the **E-mail To** field.
6. Select **Add Files** and navigate to support zip's saved location.
7. Select the support zip, then select **Open**.
8. Select **Upload All**.

# Luminex Technical Support

Contact Luminex Technical Support by telephone in the U.S. and Canada by calling: 1-877-785-2323

Contact outside the U.S. and Canada by calling: +1 512-381-4397

International: + 800-2939-4959

Fax: 512-219-5114

Email: [support@luminexcorp.com](mailto:support@luminexcorp.com).

Additional information is available on the Luminex website. Search on the desired topic, navigate through menus. Also, review the website's FAQ section. Enter *http://www.luminexcorp.com* in your browser's address field.

This manual can be updated periodically. To ensure that you have a current version, contact Technical Support.

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