

Software Update Notification

PSS0223-02 – Mastersizer 3000 v1.01 software

Abstract

This document details the release of software PSS0223-02 – v1.01 of the software for the Mastersizer 3000 laser diffraction system. It covers software issues fixed and new features introduced. This information is required to perform a risk analysis to determine if the software should be installed. In this risk analysis the benefits of the new features provided and resolved software issues must be weighed against the risk of new issues that may be introduced to vital areas of the software or possible changes to the results of future analysis. Installation instructions are provided.

Installation

It is assumed that you have authority to install or update software within your facility. It is also assumed that you have Administrator rights for the system upon which the software is installed, as this is a requirement of the installation process. If you do not have this authority please consult with your I.T. support department before proceeding.

Minimum System Requirements

The minimum requirements for running this software are highlighted in table 1.

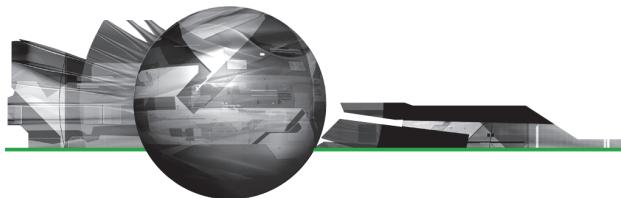
Table 1: Minimum system requirements for the Mastersizer 3000 software.

Feature	Specification
Processor Type	Intel Core i5 Processor
Memory	4GB
Hard Disk Storage	250GB
Additional Storage Media	CD-ROM or DVD +/-RW drive
Display Resolution	1024 x 768
Connectivity	1 high speed USB port
Operating System	Windows 7 Professional (32 bit and 64bit) Windows XP Professional™ with Service Pack 3 installed

Although the software can run using Windows XP Professional, it has been fully tested under Windows 7. Windows 7 is therefore the preferred operating system.

Installation Instructions

The software suite comes on an auto-loading CD-ROM. Inserting the drive into a system configured to Auto-run a CD will run the installation program automatically. If your system does not support this feature, run the **\Mastersizer 3000\setup.exe** program from your CD drive.



Note: Any firmware updates required for your system will be installed at the same time as the software. It is important to keep the firmware and software 'in sync', since this is the configuration that will have been tested by Malvern Instruments prior to release of the software.

Installing the Malvern Access Configurator (MAC) Application

The software suite includes a copy of the Malvern Access Configurator tool that allows you to manage the security aspects of the Mastersizer 3000. The MAC software may be installed either on the PC used to control the instrument or a separate networked PC. Installing on a separate PC allows you to manage the security centrally.

Note: The MAC software does not auto-install. To install this software, navigate to the \Malvern Access Configurator folder and run the **setup.exe** file.

Uninstall Procedure

The software can be uninstalled using the standard **Add/Remove Programs** feature in the Windows 'Control Panel'.

Software Licence Files

The Mastersizer 3000 software requires a valid licence file to run. When connected to an instrument, the system automatically generates this file and the user will be asked to accept the licence.

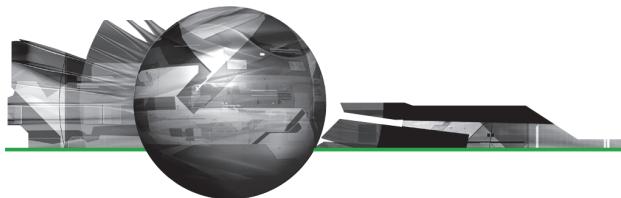
Note: If you wish to install the Mastersizer 3000 software on additional computers, you will need to follow the procedure below for sharing a software licence.

Sharing a licence

In order to enable the use of the Mastersizer 3000 on a computer which is not connected to a system, it is necessary for users to create a license. This can then be shared with other users, allowing them to gain access to the software.

To share a licence, follow the steps below:

1. At the PC that is connected to the instrument, run the Mastersizer 3000 software and click on the **Application Menu** icon  at the top left of the screen.
2. Select 'About' and click on the **View Licence..** button.
3. Click on the **Share this Licence..** button. The system tells you what information the licence file contains.
4. To accept that information click **Yes** and choose a location to copy the file to (e.g. a memory stick).
5. At the separate PC, install the Mastersizer 3000 software from the CD and start the program. At the licence screen, click the **Install** button.
6. Browse to the folder that contains the licence file from step 4 above, and select the licence file. The licence details will be shown and you can now **accept** or **decline** the licence.



Note: The software licence is specific to a given Mastersizer 3000 system. When a licence is shared, detailed user and computer information is stored in the licence file, ensuring it can be traced back to its source Mastersizer 3000 system. Users should only share the licence with users within their organisations who need to analyse data off-line. **The software licence should not be shared with other organisations who do not own a Mastersizer 3000 system without the consent of Malvern Instruments.**

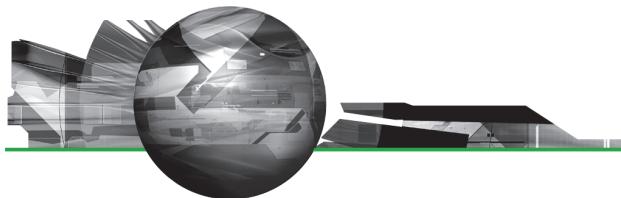
New Features

This is the first release of the Mastersizer 3000 software. Please refer to the software help system and user manuals for information regarding the software's operation.

Fixed Issues

The main issues fixed in this release of the Mastersizer 3000 software are listed below.

Issue	Comment
When enabling ultrasound, the stop button does not enable until 8 seconds have passed.	Bug Fixed
When changes are made to an SOP, these are not saved correctly.	Bug Fixed
Pressing stop during a dry measurement does not stop the sample feed.	Bug Fixed
If a measurement file opened, then closed, and then re-opened again, it opens it as read only file.	Bug Fixed
The software does not report the current state of the drain valve, only the last requested state.	Bug Fixed
The software sometimes reports dry powder feed rates of greater than 100%	Bug Fixed
The dry clean sequence doesn't operate correctly, and can crash the software.	Bugs Fixed
Hydro unit clean sequence occasionally fails with a message stating that the tank did not fill in time, even when no error has occurred.	Bug Fixed
Print features are not available until the record view selection changes at least twice	Bug Fixed
Localisation problems in the German language software, related to the handling of different decimal separators.	Bugs Fixed
User sizes incorrectly displayed in Oversize and Undersize result tables	Bug Fixed
Stirrer speed drops to 500rpm after filling on the first run of an SOP, independent of the selected stirrer speed in the SOP settings.	Bug Fixed
User can bypass the background measurement by selecting to clean the system	Bug Fixed

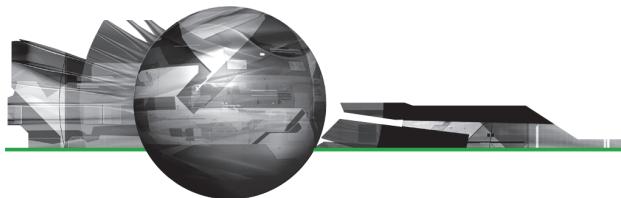


Incorrect data export formatting with mixed language and region settings	Bug Fixed
Aero S sample feed starts as soon as an SOP is opened.	Bug Fixed
Allow default reports to print to one page in the same way as on the Mastersizer 2000.	Feature implemented
Enable a 'no clean' option for both wet and dry SOPs	Feature implemented
Allow the oversize and undersize curves to be –plotted on a second y-axis in result graphs.	Feature implemented
Change the export behaviour so that all data is exported into rows when the Rows option is selected.	Feature implemented

Known Issues

The following software bugs have been discovered within the software, and will be investigated as part of a future release:

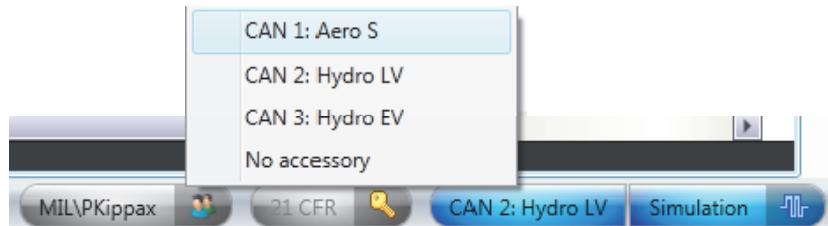
Issue	Work Around	Comment
Disconnecting the instrument while the measurement manager is open and then starting a measurement causes the application to hang.	The measurement manager window should be closed when disconnecting the instrument.	Software Bug
When graph symbols are displayed in reports, they do not show on printouts.	None available.	Software Bug
Some Mastersizer 2000 measurement files (.mea) cannot be loaded into the Mastersizer 3000 software.	None available.	Software Bug
A save prompt is displayed when closing a modified, read-only SOP file.	None available.	Software Bug
The System Audit displays duplicated columns for each language under which the system has been run when auditing has been enabled.	None available.	Software Bug
It is not possible to drag the trend cursor to the first record in the trend view of the live display.	Use the cursor keys to drag move the trend cursor back to the first record.	Software Bug
Loading and saving measurement files on a network is slow.	If local IT policies allow, save files to the local computer.	Software Bug
The ultrasound indicators on the wet accessory display do not update when certain ultrasound faults occur.	None available.	Software Bug
The ability to pause between the different stages of an SOP measurement is not available.	None available.	Feature yet to be implemented.



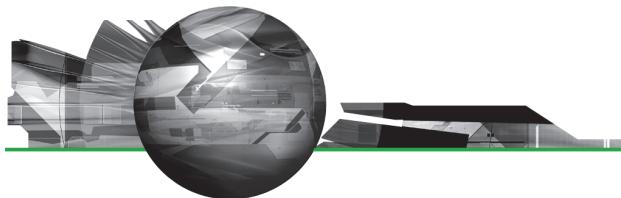
Software crashes when editing, copying or pasting records	See know issue description below.	Software Bug
Record numbering isn't correct after editing a record or copying and pasting records between files.	Use the work-arounds described below for the editing, copying and pasting issue.	Software Bug
The Contact Malvern feature in the Maintenance window causes the software to crash or displays a message about the wrong parameter format being used.	Manually email the maintenance report text file to helpdesk@malvern.com if support is required.	Software Bug
The active accessory is not always changed when the changing between wet and dry cells.	See know issue description below.	Software Bug
The stirrer is left running at a different speed to the last demand speed following a clean operation.	Manually set the accessory stirrer speed using the Tools-Accessories control dialogue.	Software Bug
Measurement continues when the Hydro EV dispersion head is raised during a measurement.	Do not raise the Hydro EV dispersion head once the background measurement begins.	Software Bug
Reports occasionally appear blank or empty even when the record selection in the Records View changes.	Adjust the report zoom slider in the bottom right-hand corner of the report window to refresh the display.	Software Bug
Sample documentation window occasionally appears behind the main measurement manager window when repeating an SOP after the clean step has completed, making it look like the measurement has stopped working.	Close the measurement manager window and then close the documentation window that will now be visible. Start the SOP again using the Run SOP button.	Software Bug

Active accessory does not change when switching between wet and dry measurement cells

Sometimes, the software does not select the correct accessory when users insert the measurement cell into the instrument bench. If this occurs, users should manually select the accessory by clicking on the accessory icon in the status bar of the main software window. A menu will be shown of the available accessories:

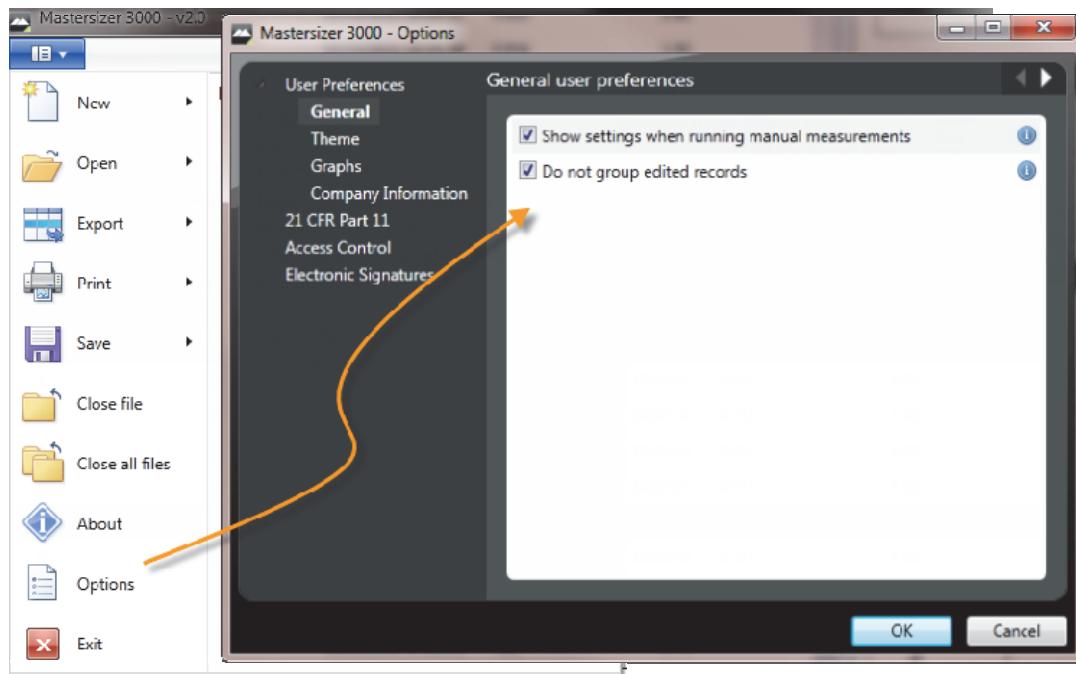


Simply select the accessory from the menu to activate it.

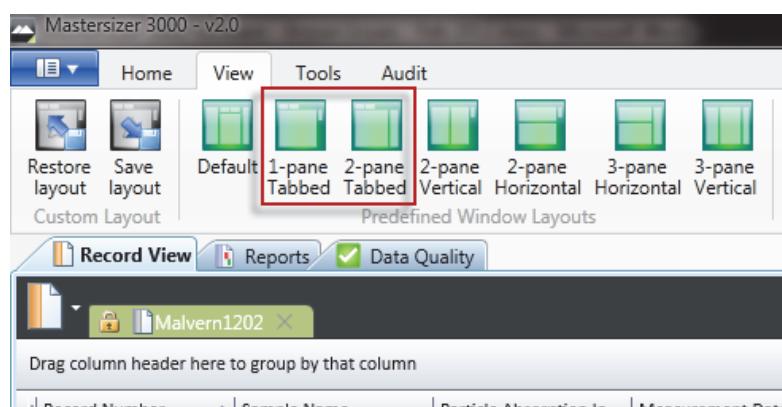


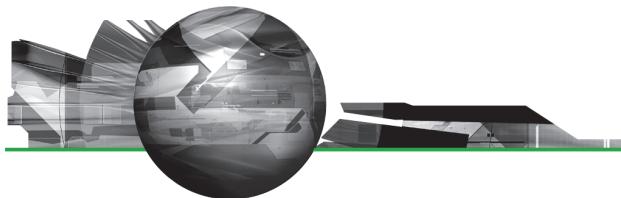
Software crashes when editing, copying or pasting records.

There have been some instances where record view functions such as copying, pasting and editing records causes the software to crash. The Malvern software team are working on a general fix to these issues. In the meantime, if crashes are observed, it is recommended that Record Grouping is disabled within the software options:



This forces edited version of records to be displayed on a separate row in the records view, in the same way as the Mastersizer 2000 software. In addition, the software may become more stable by docking the Reports tab behind the Records View tab. This can be done by either dragging the Reports tab over the Record View area or by using one of the following pre-defined views that are available in the View tab; *Default*, *1-pane tabbed*, or *2-pane tabbed*:





Backward Compatibility

This is the first release of the software which supports the new Mastersizer 3000 system (MAZ3000). This software is only compatible with this system, and cannot be used with the Mastersizer 2000 (APA2000) system. It is possible, however, to review Mastersizer 2000 results within the Mastersizer 3000 software. Please refer to the user manuals and software help for guidance as to how this is achieved.

Cleaning-up previous pre-beta versions

If previous pre-beta versions of the software have been installed on your computer, we recommend that the following steps are used to ensure that the installation completes successfully and all files are up to date:

- Open Windows Explorer.
- Navigate to the shared Malvern Instruments application data folder. This is different for Windows XP and Windows 7:
 - **Windows XP:** Normally found in “C:\Documents and settings\All users\Application Data\Malvern Instruments”
 - **Windows 7:** The folder is normally located in “C:\ProgramData\Malvern Instruments\”
- Rename the **Mastersizer 3000** folder to **Mastersizer 3000 BAK**
- Navigate to the Malvern Instruments folder in your private documents folder. This is different for Windows XP and Windows 7:
 - **Windows XP:** The folder is normally located in “C:\Documents and settings\{USERNAME}\My Documents\Malvern Instruments”; where {USERNAME} is the user account you login to the PC with.
 - **Windows 7:** The folder is normally located in “C:\Users\{USERNAME}\Documents\Malvern Instruments”; where {USERNAME} is the user account you login to the PC with.
- Rename the Mastersizer 3000 folder to Mastersizer 3000 BAK.

No files will be deleted or removed by following these steps.