

Software Update Notification



Filename: Software Update Notification for DTS v6.01.doc Doct. Version No: 1
Date: May 2009 Author: M.T.Connah

Product	PartNo.-Issue
Software suite	PSS0012-19

Product	PartNo./Version
Zetasizer series	PSW0085/6.01
Firmware	PFW0044/1.34.002

Manuals	PartNo./Version
Zetasizer Nano series	MAN0317/4.0
MPT-2	MAN0318/3.00
Zetasizer APS	MAN0425/1.0
Zetasizer μ V	MAN0428/1.0

Software update summary

Main features Version 6.01
Support added for Zetasizer APS and Zetasizer μ V
When the computer is not connected to a system the instrument type can be selected

NOTES

Version 6.01 is not compatible with the HPPS

Install the software with the Zetasizer switched off or not connected.

Contents

Contents.....	2
1. Overview	3
1.1 Main feature additions	3
2. Compatibility.....	3
2.1 Optics unit	3
2.2 Data.....	3
2.3 Computer.....	3
3. Installation	3
3.1 Software Installation for Windows Vista™ and Windows XP™ Pro	4
3.2 Connecting the Zetasizer to the PC	5
3.3 Uninstall procedure	7
3.4 Software change requests implemented in Version 6.01 from version 5.10.....	7
3.5 Known issues and comments	8
4. Customer deliverables	9
4.1 Application Software Suite.....	9

1. Overview

This document is the software release note for Zetasizer series software P/N PSW0085 for software suite PSS0012-19 in accordance with ECN10759

This release adds support for the Zetasizer APS and Zetasizer μ V, incorporates suggested improvements and cures reported problems.

1.1 Main feature additions

1.1.1 Support for Zetasizer APS and Zetasizer μ V

Version 6.01 will support all versions of the Zetasizer Nano, plus the Zetasizer APS and the Zetasizer μ V.

2. Compatibility

2.1 Optics unit

Version 6.01 software is compatible with all hardware variants of the Zetasizer Nano series, the Zetasizer APS and the Zetasizer μ V. It is not compatible with the HPPS.

2.2 Data

Version 6.01 will read data from all versions from 3.xx, 4.xx, and 5.xx. It will not read data from Version 1.00 or Version 1.10 software. If data taken with a previous version is edited, even if only the sample name is changed, the result can change due to small changes designed to improve the analysis.

2.3 Computer

2.3.1 Operating system

Version 6.01 is compatible with Windows VISTA Ultimate, Enterprise and business editions. It has partially tested with Windows XP Pro (SP2) and Windows 2000 (SP4), but a full alpha test has not been performed. If using with Windows 2000, before starting the installation process, the 'Windows Installer Update' must be selected as suggested during the installation process.

NOTE: Windows XP 'Home' and Windows VISTA home basic, and home premium versions are not supported

2.3.2 Recommended Computer Requirements

Intel Core 2 Duo, 2GB RAM, 40GByte hard disk drive, 1024 x 768 screen resolution running in 32 bit colour mode, CD-ROM drive, 1 free USB port, Windows Vista (SP1) operating system.

The software and system can be used with a laptop computer with a free USB port.

3. Installation

3.1 Software Installation for Windows Vista™ and Windows XP™ Pro

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 **setup.bat** program from the root directory of your CD drive.

Note: For DTS Series software, Windows XP™ Pro and Windows Vista™ will not allow an installation if the user does not have administrator access. This is in line with Microsoft's Logo policy and is standard practice.

Note: You must either switch-off the Zetasizer or unplug the USB cable from the PC or Zetasizer before installing the software.

3.1.1 Windows XP™ Users

All DTS version 3.xx, 4.xx, and 5.xx software must be uninstalled before version 6.01 is installed. The installer will ask you if you want to uninstall a previous version if it detects an older version is installed.

Zetasizer Nano installation

If the Zetasizer Nano is left connected to the PC during installation, you will be prompted with the following message.



You must either switch-off the Zetasizer Nano or unplug the USB cable from the PC or Zetasizer Nano and then press OK. If you press the Cancel button the installation will continue but the legacy USB driver will not be uninstalled.

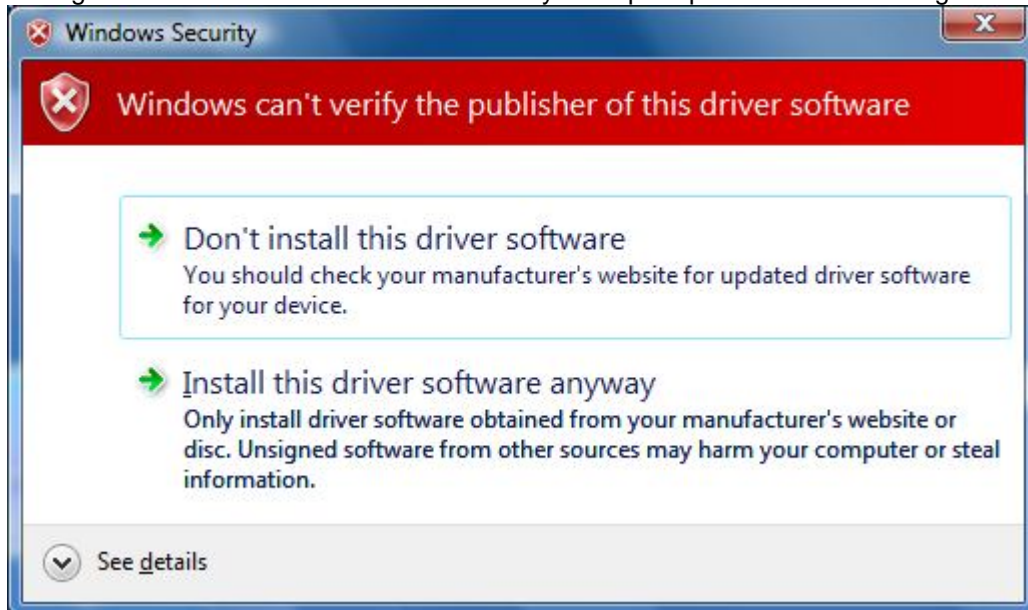
When the new USB driver is installed the following message will appear twice,



This warning can safely be ignored as the software installation has been fully tested on Windows XP™. If this warning is encountered the button, 'Continue Anyway' should be selected.

3.1.2 Windows Vista™ Users

During the installation on the new USB driver you be prompted with the following message,



This warning can safely be ignored as the software installation has been fully tested on Windows Vista™. If this warning is encountered the button, 'Install this driver software anyway' should be selected.

3.2 Connecting the Zetasizer to the PC

With the software installed the instrument should be connected via the USB port.

Windows Vista™ users: Windows will indicate that the Malvern Instruments System has been connected to the PC and Windows will proceed to install the driver for you. Windows will indicate that the new hardware is installed and ready to use.

Windows XP™ Pro users: Windows may display the New Hardware Wizard window,



The name used to identify the hardware will be displayed as “Malvern Zetasizer” rather than “Malvern Instruments Nano” if you are connecting a Zetasizer APS or Zetasizer μ V.

This should be left with the default selection of ‘Install the software automatically’ and the ‘Next’ button should be pressed so that file transfer begins. Once file transfer has completed the ‘Finish’ button should be pressed to complete the installation.

You may see the same warning as described in section 4.1 regarding. The warning can safely be ignored as the software installation has been tested on Windows XP™. If the warning is encountered the button, ‘Continue Anyway’ should be pressed.

Windows will indicate that the new hardware is installed and ready to use.

Zetasizer APS and Zetasizer μ V users: The New Hardware Wizard will appear a second time as these instruments require two drivers to be installed. Use the steps described above to install the second driver.

Running the software

When the software is started the first time, the following dialog box will appear. Click on the appropriate system to select it. This dialog will not appear the next time the software is started.



The instrument type can be changed at any point by selecting the menu item; 'Tool', 'Options', 'Instrument type'. Once the instrument type has been changed the software must be restarted for the change to take effect.

3.3 Uninstall procedure

The software can be uninstalled using the standard Add/Remove feature in the Windows 'Control panel'

3.4 Software change requests implemented in Version 6.01 from version 5.10

3.4.1 Additions

None

3.4.2 Deletions

None

3.4.3 Changes

SCR	Description
7499	The instructions in the DIP cell Zeta Standard SOP have been clarified
7519	The SOP from example results that were generated with the Research feature key installed can now be extracted
7668	If a low count rate is detected in a forward angle measurements, the duration is set to 80 runs.
8154	In the pH calibration dialog, the value displayed is now the raw mV output from the probe
6756	The display speed and interaction with the records file has been improved

3.4.4 Bug Fixes

SCR	Description
8482	Expert Advice and Zeta Quality Report outputs are now consistent
7521	Measurement position in molecular weight measurement is now correct when the 12ul cell type is selected.
8065	The misnamed DTS1070 Dip cell has been renamed correctly to ZEN1002.
7608	Fringe spacing is now correct for the 532nm green laser system
8646	In SEC detector mode, the size points now line up correctly with the intensity trace
8750	An option has been added to allow an SOP Playlist to run indefinitely.

3.5 Known issues and comments

3.5.1 Software may freeze when resizing columns or sorting records in the Records View when connected to an APS or μ V

This problem occurs when running on a low specification PC that does not have Hyper-Threading (HT) or only has one single core CPU. It is advisable to run the software on a PC that meets the recommended specification detailed earlier in this document if the PC is to be connected to a Zetasizer APS and Zetasizer μ V.

3.5.2 USB Detection

USB detection occurs automatically on new computers. On older computers the instrument is not always detected automatically and the instrument icon in the bottom right-hand corner of the status bar will remain greyed-out. This is fixed by closing the application, restarting the computer and restarting the software.

3.5.3 Samples database update

The samples database was updated after version 3.32 for the dispersants 'Water' and 'Ethylene glycol'. The update will occur when the new software is installed and will lead to changes in the measurement results.

3.5.4 Missing parameters in user reports

The parameter dictionary has been updated for this version of the software and some of the parameters have changed. For reports that the user may have created containing the affected parameters, the parameters will become undefined. This can be seen when a report is opened and the parameter displays the text 'No parameter has been selected' or if the nothing is shown next to the text label (i.e. the value appears blank). To fix this problem for each parameter carry out the following steps:-

- 1) Double-click on the affected parameter to bring up its property dialogue.
- 2) Click the 'Select' button to display the 'Select a parameter' dialogue.
- 3) Select the relevant parameter.

N.B. Remember to correct the affected parameters on both the screen and page layout views of the report.

3.5.5 Results

The analysis algorithms for the calculation of size, zeta potential and molecular weight, including data filtering, are being continually improved. The effect of this is that if data taken from a previous version of software is edited, the result may change, even if only the sample name is edited.

This is because the algorithms themselves are not stored with the record.

This does not apply to parameters stored with the record such as the viscosity, and refractive index etc. as the same parameters are always used in the recalculation of the edited result.

This does not of course change the result of the stored record, as after editing a new record is created. To tell if a record is the original or has been edited, the parameter 'Is edited' can be added to a report or the record view. This can be found in the measurement audit information section of the parameters list. It will display 'False' if the record has not been edited.

4. Customer deliverables

4.1 Application Software Suite

The software is contained on one CD-ROM. The disk is labelled PSS0012/18

The installed software requires about 150Mbytes of hard disk space.

4.1.1 Disk contents

- Operating software including updated help files for all new features
- Zetasizer User series manual
- MPT-2 manual
- Firmware
- USB drivers
- Software Update Notifications for changes from previous software version
- Adobe Acrobat reader