Software Update Notification

Product	PartNo.-Issue
Software suite	PSS0012-23

Product	PartNo./Version
Zetasizer series	PSW0085/6.20
Firmware	PFW0044/1.34.002

Manuals	PartNo./Version
Zetasizer Nano series	MAN0317/5.0
MPT-2	MAN0318/3.00
Zetasizer APS	MAN0425/1.0
Zetasizer µV	MAN0428/1.0

Main features
Compatibility with revised version of High Concentration cell

NOTES

Version 6.20 is not compatible with the HPPS
Version 6.20 is not compatible with 64 bit versions of any operating system

Install the software with the Zetasizer <u>switched off</u> or <u>not connected</u>.

Contents

1. Overview

This document is the software release note for Zetasizer series software P/N PSW0085 for software suite PSS0012-22 in accordance with ECN **11362**

A revised version of the High concentration cell has been introduced, and this requires this new version of software in order to give the correct results.

A number of reported bugs have been corrected.

2. High concentration cell

The design of the electrode chambers has been changed to improve their manufacturing tolerances.
The effect of this is that the distance between the electrodes has changed. This has required a change of this parameter in the software in order to give the correct results
This means that for existing cells with Serial Numbers in the range MAL1038944 and MAL1042283 updating the software from version 6.12 to a later version will require the electrode chambers to be exchanged for free replacements.
To do this please call the UK Helpdesk on + 44 (0)1684 891800, or e-mail on helpdesk@malvern.com, and refer to Technical Bulletin **TB1318.**

If the software is updated without the electrode upgrade, the results will increase in magnitude by approximately 7%.

3. Compatibility

3.1   Optics unit

Version 6.20 software is compatible with all hardware variants of the Zetasizer Nano series, the Zetasizer APS and the Zetasizer µV. It is <u>not</u> compatible with the HPPS.

3.2   Data

Version 6.20 will read data from all versions from 3.xx, 4.xx, 5.xx, 6.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.

3.3   Computer

3.3.1   Operating system
Version 6.20 is compatible with Windows XP pro (SP3) and Windows VISTA. It has partially tested with Windows 7, but a full alpha test has not been performed. Only the 32bit versions of Windows operating systems are supported. 64bit operating systems are not supported.

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

3.3.2   Minimum Computer Requirements
Intel Dual Core or hyper threaded processor, 2GB RAM, 150MB free hard disk space, 1024 x 768 screen resolution running in 16 bit colour mode, CD-ROM drive, 1 free USB port, Windows XP Pro (SP2 or later) operating system, 32 bit operating system only.

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

3.3.3   Recommended Computer Requirements

Intel Core 2 Duo, 2GB RAM, 160GByte hard disk drive, 1024 x 768 screen resolution running in 32 bit colour mode, CD-ROM drive, 1 free USB port, 32 bit Windows 7 operating system.

4. Installation

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

The software suite comes on an auto-loading CD-ROM. Inserting the CD 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.

4.1.1   Windows XP™

All versions of DTS 3.xx, 4.xx, 5.xx or Zetasizer 6.xx software must be uninstalled before version 6.20 is installed. The installer will ask you if you want to uninstall a previous version if it detects an older version is installed.
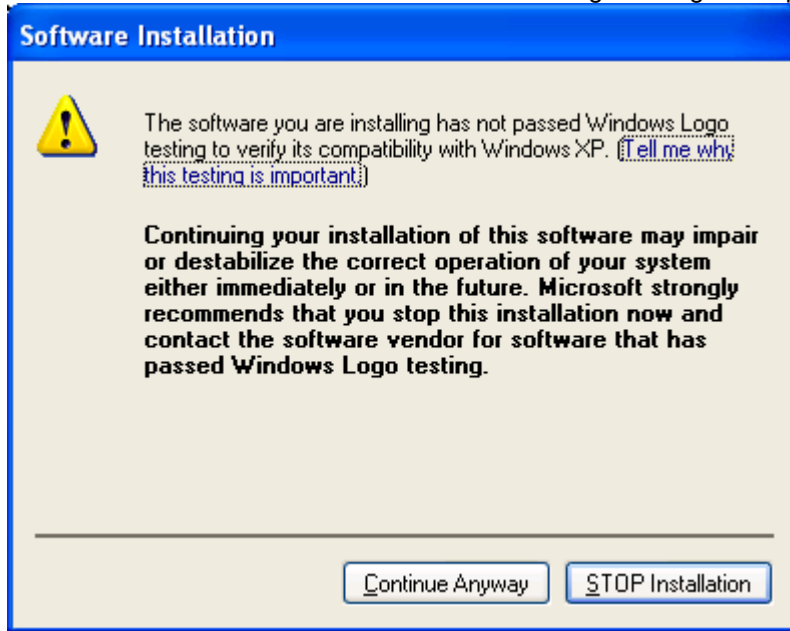
Zetasizer Nano installation
If the Zetasizer Nano is left connected to the PC during installation, you will be prompted with the following message.

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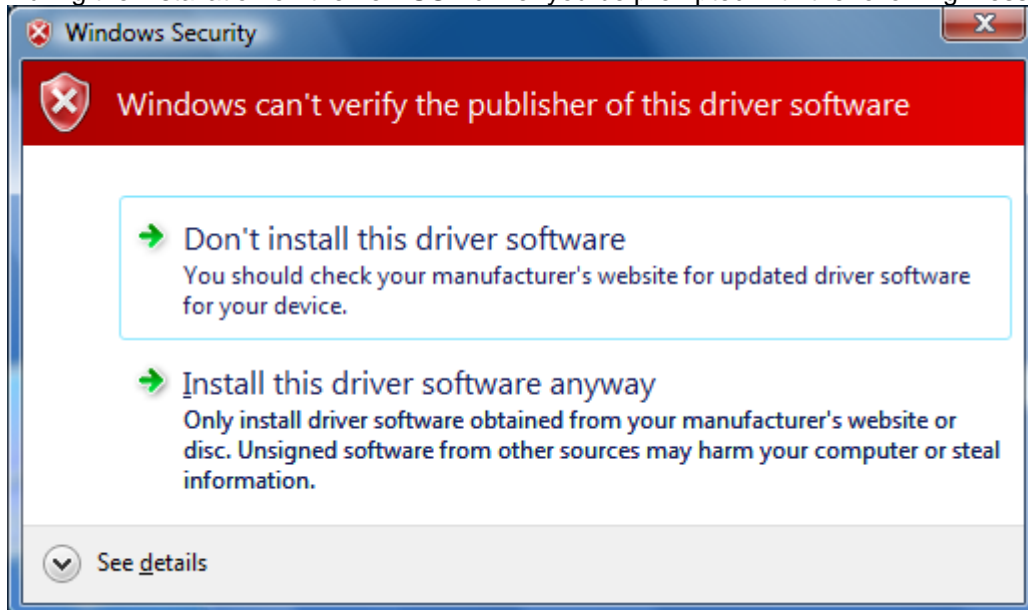
When the new USB driver is installed the following message will appear twice,

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.

4.1.2   Windows Vista™

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.

4.2   Software installation for Windows 7™

The software suite comes on an auto-loading CD-ROM. Inserting the CD 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.
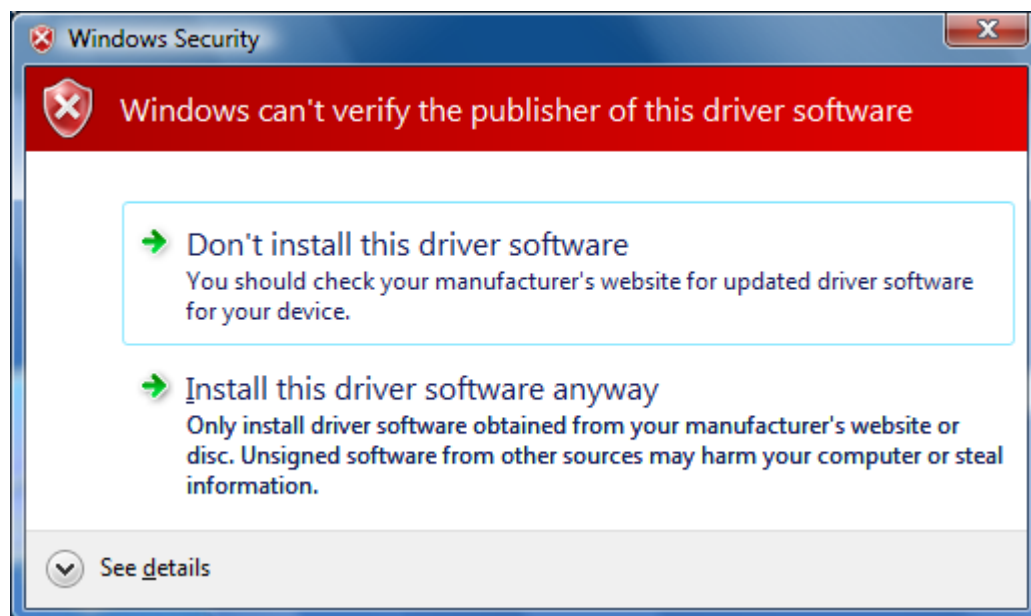
Note: For DTS Series software, Windows 7™ will not allow an installation if the user does not have administrator access. This is in line with Microsoft's Logo policy and is standard practice.

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

At the beginning of the installation the user may be prompted by the following dialog. The user should click on the "Yes" button.

During the installation of the new USB drivers you'll be prompted with the following message twice,

This warning can safely be ignored as the software installation has been fully tested on Windows 7. If this warning is encountered, 'Install this driver software anyway' should be selected.

4.3   Connecting the Zetasizer to the PC

With the software installed the instrument should be connected via the USB port, and the system switched on.

If you are connecting to a Zetasizer APS or Zetasizer µV, the name used to identify the hardware will be displayed as "Malvern Zetasizer" rather than "Malvern Instruments Nano".

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

You may see the same security warning as described in the previous section. The warning can safely be ignored as the software installation has been tested on Windows 7™. If the warning is encountered the 'Continue Anyway' should be selected.

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

4.4   Zetasizer APS and Zetasizer µV 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.

4.5   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; 'Tools', 'Options', 'Instrument type'. Once the instrument type has been changed the software must be restarted for the change to take effect.

4.6   Uninstall procedure

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

4.7   Software change requests implemented in Version 6.20 from version 6.12

4.7.1   Additions
None

4.7.2   Deletions
None

4.7.3   Changes

None

4.7.4   Bug Fixes

SCR	Description
8718	Protein utilities modifications
8880	Zeta transfer standard SOP now contains temp equilibration time and 60 second inter-measurement delay time
9071	Installation Macro is now correctly installed on Vista
9148/9281	Product number of 96well plate is now correct

9196	HC cell default analysis is now Monomodal when set to automatic
9198	ZS90 size measurements at 90 degrees are now labelled correctly
9200	Scattering angle information for size measurements added to log File
9221	Default size measurement position is now correct for ZEN0010 cell
9222	ZEN0010 size measurement position is now fixed at 5.00mm
9223	The correct zeta analysis model is now used with ZEN0010 cell
9224	The correct measurement position is now displayed with ZEN0010 cell
9258	The ZEN1010 option has been added to the count rate meter monitor
9298	The attenuator settings are now correct with non-English Windows
9299	The rinse count rate is now a default parameter
9311	The concentration Utilities advice has been modified for Zeta potential measurements
9331	The log file now correctly identifies a 90 degree system when initialising
9333	Add features to the Zeta measurement
9347	The cell Type for the ZEN1010 is now correct in the Measurement SOP
9354	The translation stages are homed before each plate measurement starts
9363	The shipped installation test macro now runs as intended
9394	The electrode spacing for the ZEN1010 high concentration cell has been modified
9395	Random Japanese used for testing has been removed
8622	References to the DTS0050 test material have been removed

5. Customer deliverables

5.1 Application Software Suite

The software is contained on one CD-ROM. The disk is labelled PSS0012/23

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

5.1.1 Disk contents

- Operating software
- Zetasizer User manual
- MPT-2 manual
- Firmware
- USB drivers
- Software Update Notification (SUN) with changes from previous software version
- Adobe Acrobat reader