

Software Update Notification



Filename: SUN for DTS v3.00 Addendum.doc
Date: August 2003

Doct. Version No: 1
Author: M.T.Connah

Product	PartNo.-Issue
Software suite	PSS0012-01

Product	PartNo./Version
Zetasizer Nano series	PSW0085/3.00

Addendum to S.U.N. for version 3.00

Known Issues
If installing the software on a computer running XP-pro, the Nano system must be connected and switched on first
If running the software with an HPPS system, the Peltier will not be set to full power for temperature trend measurements. If a size measurement is performed first, the firmware will be set correctly for the trend measurement. If the optics unit is subsequently switched off, the firmware will be reset to the lower power and will need to be corrected with a size measurement again
The HPPS SOP that runs a 60nm latex standard, has an incorrectly set parameter that will give a result of 30nm. To cure this, load the 60nm SOP, then resave it without changing any parameters. This will correct the SOP for subsequent use
The distribution analysis version is not included as a parameter in version 3.00
If a single measurement is performed with 'Append measurement number to sample name', a '1' is still appended to the name
The derived count rate is not available in version 3.00
The maximum plot range for zeta potential measurements is +/- 20mobility units, or the Zeta potential equivalent in mV. Samples with higher apparent values than this will have a truncated distribution plot

Notes

The correct operation of the software requires that the cell zero position has been set up using a new procedure. Systems manufactured after S/N MAL060056 have already been set up using this procedure. Systems with serial numbers lower than this, including all serial numbers with the format XXXXX/YY, will need a Malvern representative to check and possibly reset the cell position.

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Product	PartNo.-Issue
Software suite	PSS0012-01

Product	PartNo./Version
DTS software	PSW0085/3.00
Firmware	PFW0044/1.00

Product	PartNo.
Zetasizer Nano Series User Manual	MAN0317
HPPS Operators Guide	MAN0314

Software update summary

Main features
Version 3.00 is the full release of software for the Zetasizer Nano series including support of HPPS. As a result of merging the Nano and HPPS software, PSS0012 has been created as a new software suite and the old HPPS software suite (PSS0005) will no longer be used.

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1. Overview

This document is the software release note for DTS software P/N PSW0085 on software suite PSS0012-01 in accordance with DCO3962.

This is the full release of software for the Zetasizer Nano series and HPPS, it should replace all alpha and beta copies.

Compatibility

Version 3.00 software is compatible with all variants of the Zetasizer Nano series and HPPS.

NOTE: Windows NT and Windows XP 'Home' version are not supported

2. Minimum Computer Requirements

Pentium PC 233MHz, 128MByte RAM, 80MByte free hard disk space, 1024 x 768 screen resolution, CD-ROM drive, 1 free USB port, Windows 2000 (SP3 or higher) or Windows XP (SP1a or later) operating system.

The software and system can be used with a laptop computer with a free USB port. The PC must meet the minimum requirements of the operating system software.

3. Recommended Computer Requirements

Pentium P4 PC 2GHz, 128MByte RAM, 40GByte hard disk drive, 1024 x 768 screen resolution, CD-ROM drive, USB port, Windows 2000 Pro (SP3) operating system

4. Functional Features

4.1 Additions

Software Change Request (SCR)	Description
3061	The correlation functions second intercept value now appears in the dictionary.
3083	Users can now enter cell voltage settings manually for zeta measurements.
3109	The SOP editor report pages are now sorted in alphabetical order.
3112	The size CPF value is now recorded in the data file.
3158	Help for the dispersant and material properties dialog is now available.
3162	Batch print is now available on the record view context menu.
3173	The 'electrophoretic mobility(M)' report is now visible in the zeta workspace.
3176	There is now a crystal screening report.
3194	Users can now enter the Mark-Houwink constants into a size record.
3200	The phase plot is now displayed on the measurement window as a default.
3205	Latex SOPs are now supplied as standard.
3258	Macromedia flash is installed by default.

4.2 Changes

Software Change Request (SCR)	Description
2420	Record view print preview now works
2522	Print after each measurement now works.
3035	On non English operating systems the SOP pages now display correctly
3072	Size measurements with neat ink now work.
3093	The demand temperature is now not changed if operator notes are entered.
3096	The Nano S90 cell position is now displayed correctly.
3104	Cumulative undersize and oversize templates now work.
3122	The lid is now checked to see if is closed before the optimisation run and not during.
3137	The frequency distribution export template now works.
3157	The size diagnostics report now fits on US Letter paper size.
3178	The software now warns users if opening a newer version data file.
3212	Cumulants analysis now uses more points in the fitting algorithm for polydisperse or large samples.
3237	The result calculation page is now used for the Molecular Weight SOP.
3242	Molecular weight export now works.
3246	The molecular weight manual measurements now get up dated with the run time, sample name and general notes.
3253	Software crashes occurring at the end of measurements have now been fixed.
3280	Change default cell position for cell type DTS2145 Low Volume glass cuvette to 4.20mm for Nano and 1.55mm for HPPS.

4.3 Compatibility

4.3.1 Operating system

Version 3.00 is only compatible with Windows 2000 Pro (Sp3 or later) and Windows XP Pro (Sp1a or later)

Windows 2000 Pro is the preferred option as the complete alpha test has been performed on this operating system.

4.4 Known Issues and comments

The following SCR's detail known software issues:

SCR	Description
2942	Unable to view or access records whilst live display is active.
2991	Not possible to average zeta results.
3110	Measurements - lid open failure exits SOP script.
3111	Size trend - gives no option to append measurement number to sample name.
3149	The 'Help with calculation language' button is not working in Calculation Editor window.
3151	Zooming in on a graph should refresh the tick labels.
3152	Graph x-axis settings are not retained the first time you open the properties dialog.

SCR	Description
3153	Action and warning limits are not displayed if Y1 axis of graph is logarithmic.
3165	Can't paste a table as an image into other applications.

5. Installation

5.1 Installation Procedure for Windows 2000 Pro / 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 **lsetup.exe** program from the root directory of your CD drive.

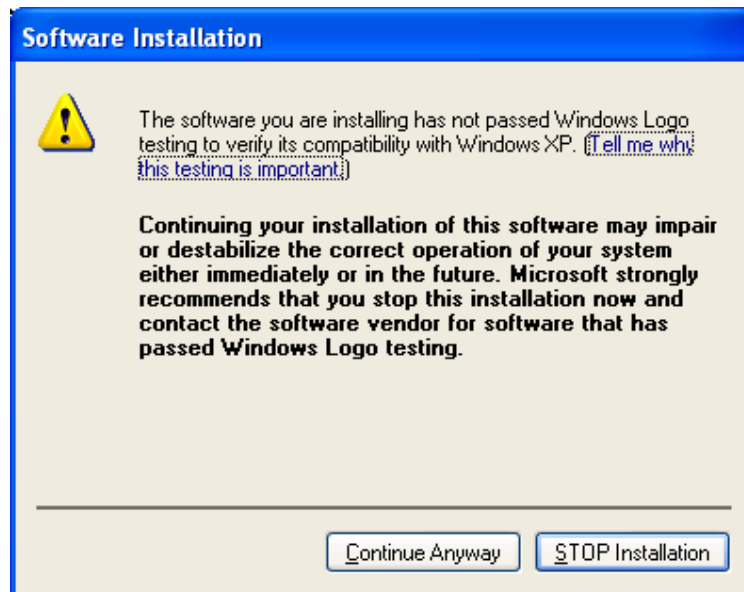
Note: If the system has Version 2.00 (HPPS) installed, then this must be uninstalled before version 3.00 (DTS) is installed as it cannot be co-resident. Version 1.10 (HPPS) can be left on the system and version 3.00 installed.

Note: On the instrument selection screen, the type of instrument, laser wavelength and scattering angle must be specified. Text information is supplied on this screen to help with your selections.

Note: For DTS Series software, Windows 2000™ Pro and Windows XP™ Pro 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: Windows 2000™ Pro systems require service pack 3 or later in order to install the software.

Windows XP may give a warning during the installation:



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

5.1.1 Windows XP USB driver installation

With the software installed the instrument should be connected via the USB port. This will result in the 'found new hardware' dialogue appearing:



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. During file transfer a similar warning dialogue as appeared in section 5.1 may be displayed. Once again the 'Continue Anyway' button should be pressed so that file transfer completes. Once file transfer has completed the 'Finish' button should be pressed to complete the installation and the computer should be restarted.

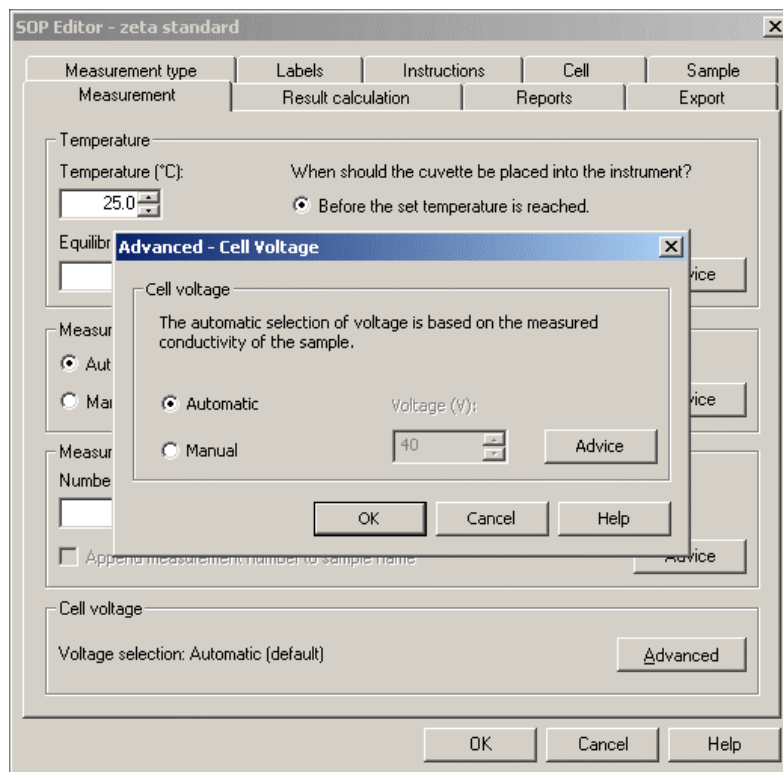
5.2 Uninstall Procedure

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

6. Operational Notes for New Features

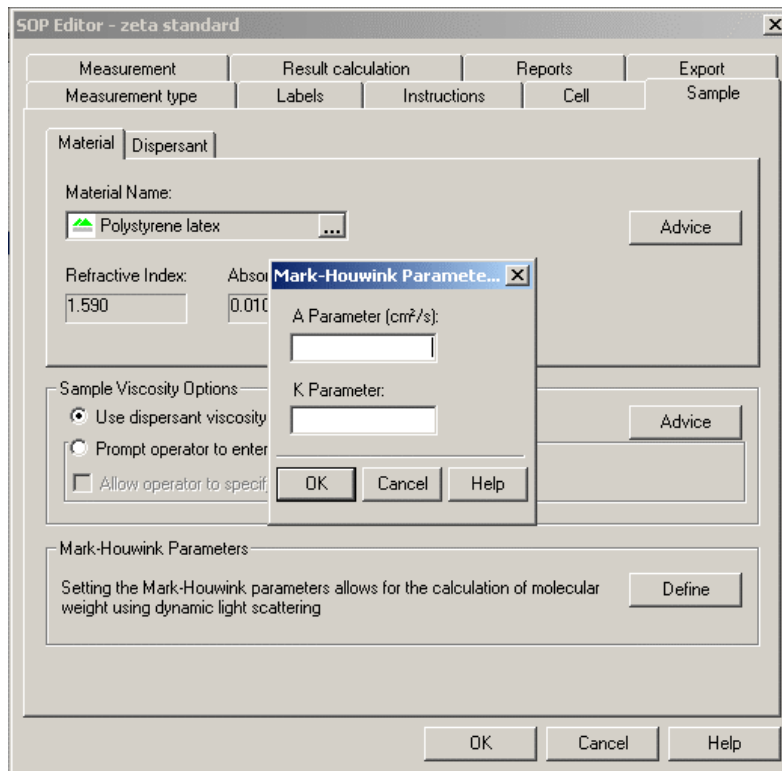
6.1 Features

- Users can now enter the cell voltages manually for a zeta measurement



- A Crystal screening report is now supplied with the software. This is **not** enabled by default. To use this report, choose Configure > Workspaces > Size and select the Report tab. Then check 'Crystal Screening Report' and click OK. Choose a size record and click on the 'Crystal Screening' tab. The report will advise as to whether the sample is suitable for crystal screening or not.

- Mark-Houwink parameters can now be entered and saved with the measurement data



- The phase plot is now displayed on the measurement window as a default. Information on how to use this is under 'Measurement Screen – Zeta' in the Help system.
- Latex SOPs for 60nm dilute and 200nm dilute and concentrated are now supplied with the software.
- A DTS0050 diagnostic report has been added. This report includes range checks of the zeta potential and conductivity and will display a warning message (in screen mode) if either of these are outside the expected range. To use this report, choose Configure > Workspaces > Zeta and select the Report tab. Then check 'DTS0050 Report' and click OK. Choose a zeta record and click on the 'DTS0050' tab. The report will advise as to whether the sample is within specification or not.

6.2 Product format

The customer will receive one CD-ROM containing the software suite. The disk is labelled PSS0012, Issue 01

7. Release Instructions

This is a full release of the software.

8. Customer deliverables

8.1 Application Software Suite

The software is contained on one CD-ROM. The installed software requires about 80Mbytes of hard disk space.

Operators guide in .pdf format on CD

Printed copy of operators guide.