

# MORPHOLOGI SOFTWARE: v10.10 (PSS0065-02) SOFTWARE UPDATE NOTIFICATION

## Introduction

This document details the release of software PSS0065-02: the Morphologi Software Suite including version 10.10 software for the Morphologi 4 instrument family. It covers software issues that have been fixed. 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 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.

## Recommended System Requirements

The minimum requirements for running this software are highlighted in table 1 below. The software has been fully tested under Windows 10 (64-bit) and partially tested using Windows 7™ (64-bit) Therefore Windows 10™ (64-bit) is the recommended operating system.

*Table 1: Recommended system requirements for the Morphologi software.*

Feature	Specification
Processor Type	Intel Core i7-7700 vPRO Processor QC/8MB/8T/3.6GHz/65W) (CPU: 5 <sup>th</sup> generation i7 minimum)
Memory	16GB (2x8GB)
Hard Disk Storage	2Tb HDD
Additional Storage Media	DVD +/-R/RW drive
Display	2 x 23" Widescreen Flat Panel Monitors for software and live video feed
Connectivity	USB3
Operating System	Windows 10 Enterprise (64 bit)

### Note:



Power saving, turn off hard disk and USB selective suspend should be disabled, to ensure that the software can operate correctly during long measurement, see *Appendix A*.



**Note:**

Some 3rd party software or operating system patches may prevent the Morphologi software from running correctly. It is not possible to test for compatibility with all windows programs.

## Supported Languages

The Morphologi software suite is available as an English language application.

## Installation Instructions

### CD installer

Disconnect the Instrument from the computer. This prevents windows from loading its default driver for the camera which causes the software to crash if run straight from installation. If the instrument was connected during installation, disconnect and re-connect to force windows to reload the correct driver.

The installer will run automatically when the CD is inserted. If the computer security prevents this, run the installer from *Morphologi\setup.exe*. Admin right are required.

The installer will prompt for confirmation to install the prior port and Nikon drivers.



**Note:**

Windows 7 computers need *.net framework 4.6* or later to be downloaded and installed before the Morphologi software is installed.

### Web installer

Disconnect the Instrument from the computer. This prevents windows from loading its default driver for the camera which causes the software to crash if run straight from installation. If the instrument was connected during installation, disconnect and re-connect to force windows to reload the correct driver.

Run the web installer *Malvern Morphologi v10.10 PSS0065-02 EN.exe*. Admin rights are required.

The installer will prompt for confirmation to install the Prior port and Nikon drivers.



**Note:**

Windows 7 computers need *.net framework 4.6* or later to be downloaded and installed before the Morphologi software is installed.

### Uninstall Procedure

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

### Backward Compatibility

This is the second release of the software which supports the new Morphologi 4 system. This software is only compatible with the Morphologi 4 platform, and cannot be used with the Morphologi G3 system. However, it is possible to review Morphologi G3 results within the Morphologi 4 software.

## New Features

This release of the Morphologi 4 software provides ID functionality supporting the Morphologi 4-ID variant. Improvements have also been made to memory efficiency and software stability.

Please refer to the software help system and user manuals for information regarding the software's operation.

## Fixed issues

The following Issues have been fixed.

Reference	Issue	Comment
#91594	Sharp Edge settings may not be configured correctly if the Foreground segmentation page of the SOP was not opened doing SOP creation.	Settings are now applied for the default Sharp Edge segmentation option when Foreground segmentation page is not opened
#87943	Morphologi G3-ID reference spectra can be used for Morphologi 4-ID analyses but do not match spectral range of the Morphologi 4-ID	Morphologi G3-ID reference spectra are padded to match spectral range of the Morphologi 4-ID

## Known Issues

The following software bugs have been discovered within the software, and will be investigated as part of a future release. Please follow the suggested work-around where one is available.

Issue	Work around	Comment
<b>Windows 7 computers need <i>.net framework 4.6</i> or later.</b>	Download and install <i>.net framework 4.6</i> or later before the Morphologi software is installed.	Windows 10 is the recommended operating system
<b>Measurement aborts at start of scan if memory allocation fails.</b>	Restart software if this issue occurs.	An error will be reported and the user will be instructed to restart the software. This bug was logged as #87316
<b>Edge stitching memory load – Use of edge stitching on some samples will cause memory use issues which can end the measurement.</b>	Edge stitching is designed for long thin particles to extend the upper size limit. It should not be used for particles where the 2nd dimension is close to the standard maximum size for the objective.	This bug was logged as #85435
<b>Crash to desktop when accessing the new Help on Windows 7.</b>	Refer to the user manual for help instead.	This bug is logged as #85743. Windows 10 is the recommended operating system
<b>Power cycle required to end process after Crash</b>		This bug is logged as #78601

## Error Reporting

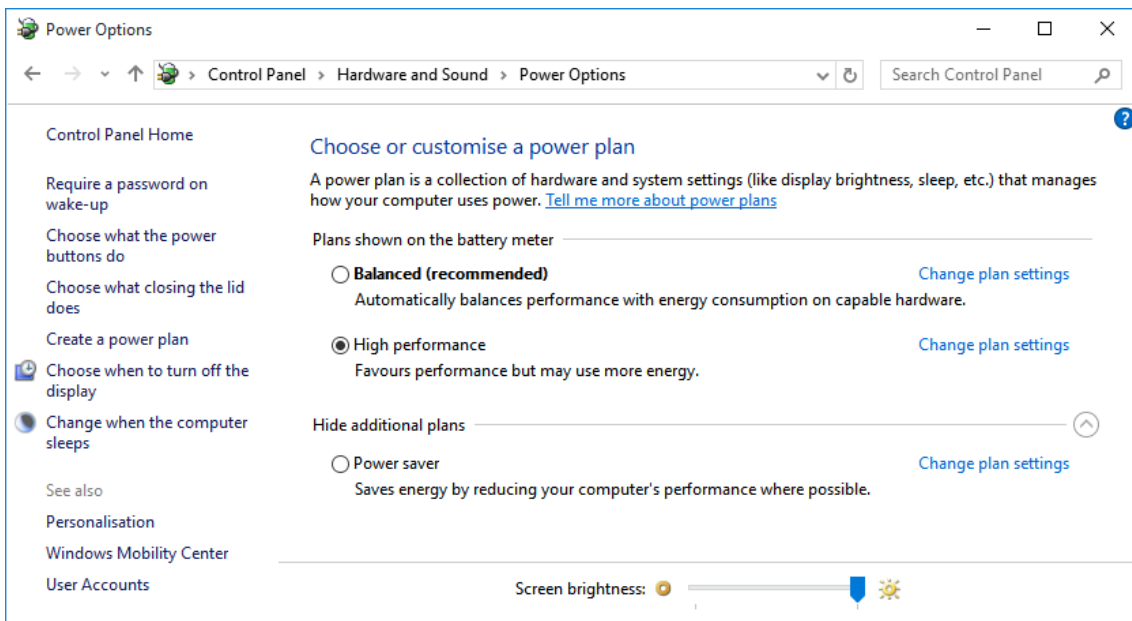
Should persistent problems occur contact the local Malvern Panalytical Helpdesk. To speed up response time include all of the following.

- A **full-screen** screen shot of any error message and everything behind it.
- Full description of what was happening at time of issue and ideally leading up to it.
- Instrument serial number (e.g. MAL1060289)
- Software version – go to **Help-About Morphologi** (e.g. 10.10; all digits are important)
- System information – double click on the Morphologi 4 or 4-ID logo at bottom right corner of the Software. Take a screen shot of system information and include on error report.
- Additional system setting export – go to **tools-maintenance**. Enter the password (maintenanceon). Select **Export** and save the text file to include on error report.

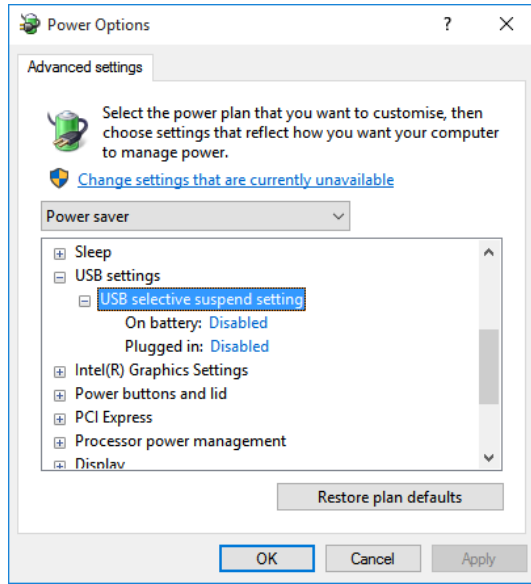
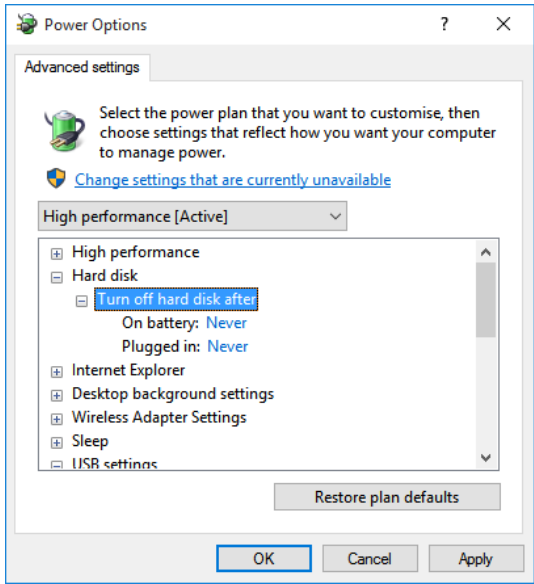
## Appendix A: Disabling power saving, hard disk sleep and USB selective suspend

To disable the power saving options of the computer, use the **Power Options** available in **Control Panel**.

1. Select the **High performance** power plan as shown.



2. Change plan settings for Turn off hard disk to Never, and USB selective to Disabled.





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