# **OMNIC SST Release Notes**

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## **About This Document**

This document contains a revision history of OMNIC SST, including new features that may not be included in the User's Guide, resolved issues, and known issues.

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## **OMNIC SST 9.14**

Release Date: Jan-2024

## **Supported Operating Systems**

- Windows 10 64-bit
- Windows 11 64-bit

#### **New Features**

None

#### **Resolved Issues**

None

#### **Known Issues**

None

# **OMNIC SST 9.13 Hotfix 5**

Release Date: Jun-2023

## **Supported Operating Systems**

- Windows 10 64-bit
- Windows 11 64-bit

### **New Features**

None

## **Resolved Issues**

#### OMNIC DDE Step-Scan Phase Calculation is wrong at low frequencies

At SST frequencies of 5-50Hz, the DDE version of the phase calculation is consistently wrong, resulting in a quadrature interferogram that is larger than the reference interferogram.

### **Known Issues**

None

## **OMNIC SST 9.9**

Release Date: Feb-2019

# **Supported Operating Systems**

- Windows 7 32-bit
- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

#### **New Features**

None

### **Resolved Issues**

#### **Collection** issue

The collections would proceed but never finish.

### **Known Issues**

None

# **OMNIC SST 9.8 Hotfix 1**

Release Date: Oct-2017

## **Supported Operating Systems**

- Windows 7 32-bit
- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

#### **New Features**

None

#### **Resolved Issues**

#### Unhandled error message when collecting with dual channels

An unhandled error message can occur after the collection has completed and the data is being added to a window.

#### **Known Issues**

None

### **OMNIC SST 9.8**

Release Date: May-2017

## **Supported Operating Systems**

- Windows 7 32-bit
- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

### **New Features**

#### Added support for GaGe 1442e PCIExpress card

The GaGe 1442e PCIExpress case can used as a replacement for the GaGe 1442 PCI card.

### **Resolved Issues**

None

### **Known Issues**

None

## **OMNIC SST 9.7**

Release Date: Sep-2016

# **Supported Operating Systems**

- Windows 7 32-bit
- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

## **New Features**

Added support for Windows 10.

Product now can be used on Windows 10

#### **Resolved Issues**

None

## **Known Issues**

None

## **OMNIC SST 9.6**

### **New Features**

None

#### **Resolved Issues**

#### Failure in iS50R TRS data collect when the data collect is paused

Pressing "Stop" rather than "Resume" after pausing the TRS data collect, causes an OMNIC crash.

#### **Incorrect spectrum with De Haseth phase correction**

The result of the De Haseth phase correction is not correct; some of the results are inverted.

#### Amplitude in AM is much less than the actual signal at the channel input

The problem was fixed by changing the setting for the high pass filter to 1.

#### Incorrect filter settings for step scan experiments

Rather than setting the filters for the linear scan Experiment Setup menu, they will be set automatically to match the experiment selection from the SST menus.

#### **Known Issues**

None

## **OMNIC SST 9.5**

No changes for this release except the version number.

#### **New Features**

None

#### **Resolved Issues**

None

#### **Known Issues**

None

# **OMNIC SST 9.4**

#### **New Features**

Added support for Windows 8.1.

#### **Resolved Issues**

#### iS50R TRS Gage series data causes exception

Reprocessing a series file with 100 or so spectra collected using a TRS Gage card causes an exception to occur.

#### Memory leak in 8700 Dual channel collect

A memory leak using the dual channel collect over long periods of time was detected.

#### **Known Issues**

None

## **OMNIC SST 9.1 Hotfix 3**

### **New Features**

None

### **Resolved Issues**

#### SST Menu items not enabled on Dual Channel only systems

On systems that only support the Dual Channel measurements, there were situations where the SST menu items for performing the measurements would not get enabled.



The earlier OMNIC 9 Hotfixes did not affect SST so no entries were made in the release notes.

### **Known Issues**

None

## **OMNIC SST 9.0**

#### **New Features**

Support for new iS50R model.

### **Resolved Issues**

None

#### **Known Issues**

None

# **OMNIC SST 8.3**

### **New Features**

None

#### **Resolved Issues**

#### Post Trigger Delay Time inaccurate with GaGe 1422

A problem with the post trigger delay in time resolve measurements being inaccurate has been fixed. The actual delay was often double the delay entered in the setup dialog.

### **Known Issues**

None

## **OMNIC SST 8.1**

### **New Features**

Support for new 8700 model.

#### **Resolved Issues**

None

#### **Known Issues**

None

## **OMNIC SST 7.4**

#### **New Features**

None

#### **Resolved Issues**

#### Zero filling when step-scan spectra are Reprocessed

In some cases an additional level of zero filling would be applied when a step-scan spectrum is reprocessed.

### **Known Issues**

None

## **OMNIC SST 7.3 Service Pack 1**

#### **New Features**

#### Support of the Nicolet 8700 (USB version)

Support has been added for the USB version of the Nicolet 8700 spectrometer. This includes the extension of the PM modulation amplitude to 4.5 lambdas and three enhancements of step-scan time-resolved data collection: The optional use of an additional input (Sync), a shorter (1 microsecond) minimum sampling interval when using the spectrometer digitizer, and the ability to use multiple triggers per step when using the spectrometer digitizer.

### **Resolved Issues**

None

#### **Known Issues**

#### **OMNIC Data Security**

If OMNIC Data Security is installed on your system, the "Require Signature When Saving Spectrum" policy should be disabled when doing a PEM Kinetics data collection so that the collections will not be interrupted by

## **OMNIC SST 7.3**

### **New Features**

#### **Support of the Nicolet 8700**

Support has been added for the Nicolet 8700 spectrometer. All of the capabilities of the Nexus 870 spectrometer are retained in this spectrometer.

#### **Resolved Issues**

None

#### **Known Issues**

None

# **OMNIC SST 7.2**

### **New Features**

### New controls in Step-Scan Time Resolved setup dialog

A checkbox labeled *Stop trigger signal after collect* and an edit control labeled *AC/DC amplification factor* have been added to the **Step-Scan Time Resolved** setup dialog.

#### **Advanced Applications command**

A new command named *Advanced Applications* has been added to the **SST** menu. It provides access to a PDF-format copy of the book "Advanced FT-IR Spectroscopy" by respected scientist, Dr. Eric Y. Jiang, Ph.D.

### **Resolved Issues**

#### Gain and Filter controls in setup dialogs

The *Gain* and *Filter* controls in the **Dual Channel Polarization Modulation** and **Step-Scan Multiple Modulation** setup dialogs are hidden unless the spectrometer type is a Magna-IR 850 or 860. These features are not available on other spectrometers.

#### **Known Issues**

None

### **OMNIC SST 7.1**

#### **New Features**

#### Support of the dual channel Nicolet 6700

Support has been added for the dual channel option of the Nicolet 6700.

### **Resolved Issues**

None

### **Known Issues**

None

## **OMNIC SST 7.0**

#### **New Features**

#### Larger sample spacing in step-scan experiments

Larger sample spacing values may be selected in the setup dialogs for step-scan experiments. The largest value allowed will depend on the spectral range specified in the **Bench** tab of **Experiment Setup**.

### **Trigger stepping with SYNC**

An additional control labeled **Trigger stepping with SYNC** is available in the **Step-Scan Amplitude** and **Phase Modulation** and **Step-Scan Time Resolved** experiment setup dialogs. (This is available only on Nexus 870 systems with Flash code version 7.16 or higher.)

## **OMNIC SST Installation Directories**

When you install OMNIC SST, the folders into which its files are copied depend on where OMNIC has been installed on your system. The default folders are C:\My Documents\OMNIC for data files, C:\My Documents\OMNIC\pdf for documentation files and C:\Program Files\OMNIC for program (executable) files and

Help files.

# **OMNIC SST Files**

The OMNIC SST install program installed the following files in the Program Files\OMNIC directory on your hard disk drive:

- OMNIC\_vi.dll
- gage\_drv.dll
- sst\_enu.chm
- magnadia.exe
- def850.cfg
- spectrometer-specific hardware help files

AdvFT\_IRSpec.pdf is installed in the <a href="Program-Files\OMNIC\pdf">Program Files\OMNIC\pdf</a> directory.

In addition, several experiment files were installed in the My Documents\OMNIC\Param directory on your hard disk. These can be used to configure the software for various step-scan and dual-channel linear scan experiments. They are listed and described briefly below.

File Name	Description
860am.exp	Default Experiment file for Amplitude Modulation Step Scan Experiments
860pm.exp	Default Experiment file for Phase Modulation Step Scan experiments
mcta4rap.exp	Default Experiment file for Rapid Scan Data Collection at 4 cm <sup>-1</sup> resolution
pas1slow.exp	Default Experiment File for Linear Scan Photoacoustic Spectroscopy at 0.0633 cm/sec mirror velocity
pas2slow.exp	Default Experiment File for Linear Scan Photoacoustic Spectroscopy at 0.0158 cm/sec mirror velocity
pas_stsc.exp	Default Experiment File for Phase Modulation Step Scan Photoacoustic Spectroscopy Using 400 Hz Phase Modulation
siqussp0.exp	Default Experiment File for Extended Spectral Range Measurements to 25,000 cm <sup>-1</sup> . Requires Quartz Beam splitter and Silicon Detector
siqussp1.exp	Default Experiment File for Extended Spectral Range Measurements to 15,000 cm <sup>-1</sup> . Requires Quartz Beam splitter and Silicon Detector

File Name	Description
IRRAS_R.exp	Default Experiment file for Dual Channel Polarization Modulation IRRAS experiments (Right Side TOM configuration)
IRRAS_L.exp	Default Experiment file for Dual Channel Polarization Modulation IRRAS experiments (Left Side TOM configuration)
VCD_R.exp	Default Experiment File for Dual Channel Polarization Modulation VCD experiments (Right Side TOM configuration)
VCD_L.exp	Default Experiment File for Dual Channel Polarization Modulation VCD experiments (Left Side TOM configuration)
VLD.exp	Default Experiment File for Vibrational Linear Dichroism using Main Spectrometer MCT-A Detector

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