

Analyst® 1.2 Service Pack 3 Software Release Notes

Final Release

Table of Contents

Introduction.....	2
Installation Preparation Checklist.....	2
Installation Instructions.....	2
Uninstalling Analyst 1.2 Service Pack 3.....	3
Notes.....	3
General.....	3
Shimadzu.....	3
Appendix A: File Summary.....	5
Files modified in Analyst 1.2 Service Pack 3.....	5
Files removed since Analyst 1.2 Service Pack 3.....	5
New Files in Analyst 1.2 Service Pack 3.....	5
Appendix B: Shimadzu Device Control Summary.....	7
Running the Shimadzu devices.....	8
Firmware.....	9
Fault Recovery.....	9
Other Operating Considerations.....	9
Appendix C: Instructions for connecting the Shimadzu SCL-10Avp System Controller to the Mass Spectrometer.....	11
Appendix D: Shimadzu Recommended Firmware Versions.....	12

Introduction

The Applied Biosystems/MDS Sciex Analyst® 1.2 Service Pack 3 provides the following support:

- New Shimadzu Devices Control (See Appendix B—Shimadzu Device Control Summary)
- Quantitation Optimization by Flow Injection Analysis (FIA) with Shimadzu autosamplers
- ChemoView and CombiView Add-on applications.

Installation Preparation Checklist

Before proceeding with the installation of Analyst 1.2 Service Pack 3, please review the requirements and specifications below.

- Shimadzu users must read Appendix B— Shimadzu Device Control Summary.
- Analyst 1.2 Service Pack 1 must be present on the computer and installed as per Analyst 1.2 Service Pack 1 Release Notes. This includes the base operating system requirements and the Computer Requirements.
- 30 MB of free hard disk space must be available.
- You must have local administrator privileges.
- You must have the Analyst 1.2 Service Pack 3 installation file from the Web download.
- Analyst 1.2 Service Pack 2 may or may not be present on the computer. Analyst Service Pack 2 is a limited release for customers having network speed problems. Service Pack 2 enhancements are included in Service Pack 3.

Installation Instructions

The Analyst 1.2 Service Pack 3 can be obtained at the Applied Biosystems/MDS SCIEX web site at:

http://www.appliedbiosystems.com/ab-mds_sciex/software/

Important: Shut down the current version of the Analyst software before performing the installation.

The installation is accomplished through the **Analyst12SP3.exe**. This program automatically places the required files in the required folders.

Step 1. Log on to the local system with administrator privileges.

You must have administrator privileges on your local workstation in order to perform the installation.

Step 2. Installing the Service Pack 3 software.

Decompress the archive file you obtained from the web-site to a convenient location on your hard drive. Locate and run the Service Pack 3 Installer, Analyst12SP3.exe . Follow the instructions provided to complete the installation.

Uninstalling Analyst 1.2 Service Pack 3

1. Backing up your Analyst data is recommended, before uninstalling Analyst.
2. Log on to the system with local administrator privileges.
3. From the Control Panel, double click **Add/Remove Programs**.
4. Select **Analyst 1.2 SP3 Upgrade** from the list.
5. Click on the **Change/Remove** button.
6. If prompted to reboot, click **Yes**. This completes the uninstall process.

Notes

Please report any issues, limitations, or feature requests via Applied Biosystems' web site at <http://www.appliedbiosystems.com>

or via e-mail at support@sciex.com.

General

- Analyst version is always reported as 1.2 in method and data files.
- To enable the SP2 fix, which improves the speed of quantitation for files residing on the network, a Registry key must be modified. Use caution when editing the Registry, as this may result in unexpected system behaviour.
 1. From the start menu, select Run and type in Regedit.exe.
 2. Set the registry key HKEY_LOCAL_MACHINE\SOFTWARE\PE
Sciex\Analyst\FileManager\Network Processing Snapshot to 1.

This fix is most useful for quantitation and is not intended for exploring large data files. When you are exploring one sample in a large data file we recommend you turn off this feature.

Shimadzu

- Acquisition methods and hardware profiles using Shimadzu devices written in previous versions of Analyst software are not supported in this release. Old methods will need to be rewritten under new hardware profiles.

- The Shimadzu simulator is not fully supported in this release. Running acquisitions in simulation mode may cause Analyst to become unstable.
- Shimadzu's drivers do not support non-linear gradient functionality.
- When setting a new COM port in the 'SCL-10Avp configuration' dialog box, click OK to save the settings when you have selected the new COM port. To test the new setting, re-open the 'SCL-10Avp configuration' dialog box and then click Test.
- Only COM1 to COM9 can be used to connect to the controller.
- Shimadzu methods saved in Tune do not save "Use" selection. The "Use" check box must be re-set each time the method is opened.
- To change focus to a Shimadzu method pane, within a Shimadzu method, click on the border of the method frame.
- Shimadzu Autosampler method and data file printouts report Autosampler cooling as enabled when it is not.
- When No Sync is selected in the method editor, the mass spectrometer runs perpetually when Shimadzu devices encounter missing racks/vials. Push the Run button on the controller to stop the run.
- Default Needle penetration does not always work and analysis runs without warning. Please, refer to the Shimadzu manual to select an appropriate value depending on the rack type used.
- Performing an abort during Shimadzu Equilibrate results in loss of queue functionality. To regain control to the queue, the Analyst Service must be stopped.
- The default duration for Shimadzu is 90 minutes. When tuning with a Mass Spectrometer scan duration shorter than the Shimadzu time program duration (as is the default tune method), you will not be able to stop the tune run from Analyst once the Mass Spectrometer has finished scanning. Press Run at the Controller to stop the run or change the default Shimadzu run duration to match the MS duration in the Shimadzu method editor.
- In FIA for Shimadzu autosampler, the current rack is not detected and all rack/plates are displayed. Make sure you enter the correct rack.

Appendix A: File Summary

The Release Notes Analyst1_2 SP3.rtf and Analyst1_2 SP3.doc files are copied to the Analyst/help directory. With the exception of the files listed below, all other files have not been changed from Analyst 1.2 Service Pack 1.

Files modified in Analyst 1.2 Service Pack 3

CSASCTCPAL.dll	CSCOHP1100co.dll	AutosamplerDBServer.adb
PD_ADConverterSim.dll	BatchEditor.ocx	AutosamplerDB.adb
EngineUtilities.dll	HWConfigurationMgr.dll	DD_Genericips.dll
ExploreDir.dll	CSVAValco.dll	
ExploreDataObjects.dll	TuneDir.dll	
WIFFTransSvrps.dll	CSCOPE200co.dll	
WIFFTransSvr.dll	StatusSvr.dll	
FMWIFFCompDocNTDriver.dll	CSPUPE200lc.dll	
PD_scSimulate.dll	StatusDir.dll	
CSPUHP1100pump.dll	CSASPE200as.dll	
CSPUHarvard.dll	Analyst.exe	
CSASHP1100as.dll	SyncMan.dll	
CSADConverter.dll	LCPumpMethodSvr.dll	
VialLayoutViewer.ocx	AcqMethodSvr.dll	
CSASGilson233.dll	AcqMethodDir.dll	
RackViewer.ocx	CSASSHEndurancecps.dll	
CSASGilson215.dll	CS_Genericips.dll	
CSMSMassSpec.dll	BatchDir.dll	
QuantOptimizeWizard.dll		

Files removed in Analyst 1.2 Service Pack 3

CSISSCL10Avp.dll
CSISSCL10Avpps.dll
DDISSCL10Avp.dll
DDISSCL10Avpps.dll
PD_ISSCL10AvpSim.dll

New Files in Analyst 1.2 Service Pack 3

ShimadzuMethodEditor.ocx	ShimLCStatus.ocx
CSISShimadzu.dll	SWDEditU.dll
DDISShimadzu.dll	SHIMLCSETUP.HLP
VDISShimadzu.exe	SWDGraph.cfg
ShimUIWrapper.dll	SpdmxaU.ocx
VSISShimadzu.dll	ShimLCSetup.dll
CSISShimadzups.dll	ShimLCMethod.dll

DDISShimadzups.dll
VDISShimadzups.dll
SWDLCCControl_DUALU.dll
SwdUtlU.dll
SwdUtl.dll
swdgraphU.dll
VIUtlu.dll
ASPIPr32U.dll

rsprot32u.dll
ShimLCCConfig.dll
ShimLCCController.exe
ShimLCSetup.cnt
og702asu.dll
cbmu.ocx
@CHKDT.LC
mfc42.dll (System32 folder)
wh2robo.dll (System32 folder)
Roboex32.dll (System 32 folder)
CBMOCX.INI (Windows folder)

Appendix B: Shimadzu Device Control Summary

New drivers supplied by Shimadzu Scientific Instruments, Inc. now provide Shimadzu device control (also provided in Analyst 1.3.1). This control differs significantly from that in previous versions of Analyst. Hardware profiles and methods created in previous versions of Analyst will not be compatible with Analyst 1.2 Service Pack 3.

The new Shimadzu drivers support a total of twenty-seven Shimadzu devices, but MDS Sciex has not tested each of the devices. There is a possibility that problems may arise with the untested devices, and Autosampler racks.

Device Type	Model #/ Description	MDS Sciex tested with full MS interface		Shimadzu tested independent of MS interface
		Analyst 1.3.1	Analyst 1.2.3	Analyst 1.3.1
Controller	SCL-10Avp	✓	—	✓
Sub -Controllers	OptionBox-L	✓	—	✓
	SubcontrollerVP	—	—	—
Auto-Samplers	SIL-10ADvp	(Rack1) ✓	—	✓
	SIL-HTA	—	—	✓
	SIL-HTC	—	✓	✓
LC Pumps	LC-6AD	—	—	—
	LC-8A	✓	—	✓
	LC-10AD	—	—	✓
	LC10-AS	—	—	—
	LC10-AT	—	—	—
	LC10-Ai	—	—	—
	LC-10ADvp	✓	✓	✓
	LC-10ATvp	—	—	✓
	Column Ovens	CTO-10A [C]	—	—
CTO-10Avp		—	—	—
CTO-10ACvp		—	✓	✓
CTO-10ASvp		—	—	✓
Valves	FCV-12AH	(OptionBox-L) ✓	—	—
	FCV-13AL	—	—	—
	FCV-14AH	(OptionBox-L)	—	✓

Device Type	Model #/ Description	MDS Sciex tested with full MS interface		Shimadzu tested independent of MS interface
		Analyst 1.3.1	Analyst 1.2.3	Analyst 1.3.1
		✓		
Detectors	SPD-10A	—	—	✓
	SPD-10Ai	—	—	—
	SPD-10AV	—	—	—
	SPD-10AVi	—	—	✓
	SPD-10Avp	—	—	✓
	SPD-10AVvp	✓	—	✓

Running the Shimadzu devices

The Shimadzu communication configuration requires modification before the devices can communicate with Analyst 1.2 SP3.

Shimadzu Controller SCL-10Avp configuration changes:

1. **Power up** the Shimadzu Controller SCL-10Avp. The System Configuration screen loads.
2. If the word **FIXED** is present in the upper right hand corner of the System Configuration screen, press the **F2** key (screen name **FIX**) to deselect **FIX**.
3. Press the **F5** key (screen name **MENU**)
4. Press the number **4** key - Response
5. Press the **F3** key (screen name **NEXT**)
6. Set the Class VP to 5.x, using the up and/or down arrow keys navigate to and highlight **Class VP**.
7. Then, using the left and/or right arrow keys navigate to and highlight **5.x**. The Class VP is now set to 5.x
8. Set the Baud Rate to 19200 using the up and/or down arrow keys navigate to and highlight **Baud Rate**.
9. Then, using the left and/or right arrow keys navigate to and highlight **19200**. The Baud Rate is now set to 19200.
10. Set the Level to Enhanced, using the up and/or down arrow keys navigate to and highlight **Level:**
11. Then, using the left and/or right arrow keys navigate to and highlight **Enhanced**. The Level is now set to Enhanced.
12. Set the Interface to RS-232C, using the up and/or down arrow keys navigate to and highlight **Interface:**

13. Then, using the left and/or right arrow keys navigate to and highlight **RS-232C**. The Interface is now set to RS-232C.
14. Press the **F5** key (screen name **MENU**)
15. **Power down** the controller
16. **Power up** the controller. The System Configuration screen loads.
17. Connect and configure individual devices to the controller according to their respective manuals.
18. Finally, check that each connected device is listed on the System Configuration screen on the controller.

Firmware

Not all Shimadzu device firmware versions are compatible with the new Shimadzu control drivers. For a list of Shimadzu's recommended firmware versions, please see Appendix D.

Fault Recovery

In the event of a device fault, either within Analyst or at the device itself, there may be difficulty reactivating or running the devices. If this occurs, perform the following reboot sequence to regain control. The order of steps must be followed to ensure recovery.

1. Deactivate the Hardware Profile in Analyst.
2. **Power down** all Shimadzu devices including the Controller.
3. **Power up** all devices attached to the Controller.
4. **Power up** the Controller.
5. Ensure that all devices shown in Controller System Configuration screen are the same devices configured in Analyst's hardware profile for Shimadzu. If not, deselect and select **F2** (screen name Fixed) on the controller until both configurations match. If necessary, reboot the Controller.
6. Activate the Hardware Profile in Analyst.

Other Operating Considerations

Shimadzu recommends that the devices attached to the System Controller SCL-10Avp, as shown in the System Configuration (Main Menu > Config), are the same as those configured in Analyst's hardware profile. Differences between the two configurations may result in communication problems between Analyst, the Controller and the attached devices.

Missed Autosampler vials, racks, or aborting a run during an Autosampler rinse, create Shimadzu device conditions that require manual intervention before Analyst can continue normal functioning. To recover Analyst control, perform the task indicated at the device display. Alternatively, following the Fault Recovery procedure outlined above will clear all conditions.

Shimadzu's default duration is set at 90 minutes. If required this is changed in the Method Editor Control tab.

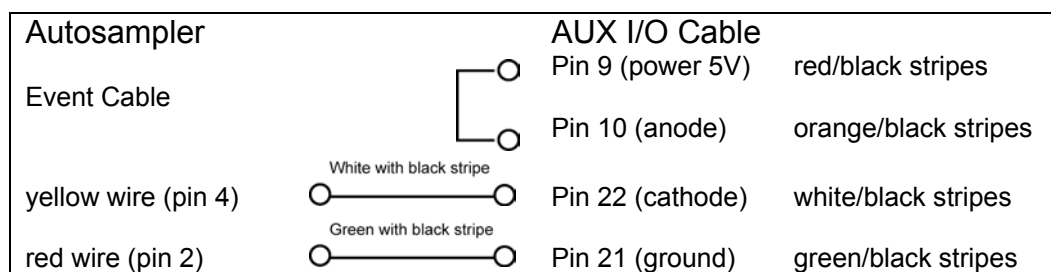
Appendix C: Instructions for connecting the Shimadzu SCL-10Avp System Controller to the Mass Spectrometer

The AB/MDS Sciex Aux I/O cable (AB/MDS SCIEX P/N 014474) is used to connect the Shimadzu SCL-10Avp System Controller to the AB/MDS SCIEX Mass Spectrometer. The following wiring connections are required:

To connect the system controller to the mass spectrometer

1. Connect the Shimadzu Event Cable to the Event1•3 Out connector on the back of the controller.
2. Connect the wires from the free end of the AUX I/O cable to the two wires from the free end of the Event Cable as follows:

Use this AUX I/O wire...	And connect to Event Cable...
White with black stripe (wire 22)	Yellow wire (pin 4)
Green with black stripe (wire 21)	Red wire (pin 2)



Wiring diagram

Important: Isolate these wires so they do not contact any other wires or metal.

3. On the free end of the AUX I/O cable, short together the following wires but do not connect them to anything else:
 - red with black stripe (wire 9)
 - orange with black stripe (wire 10)

Appendix D: Shimadzu Recommended Firmware Versions

Firmware version upgrades may be required. Please see the following table for the recommended versions.

Devices	Model Number	Version
Controller	SCL-10Avp	5.33
Subcontroller	Subcontroller	5.20
	OptionBox-L	3.2
LC Pumps	LC-10ADvp	5.26
	LC-10ATvp	5.27
	LC-10Ai	3.1
	LC-10AD	3.1
	LC-10AT	3.1
	LC-10AS	3.1
	LC-8A	1.5
	LC-6AD	1.4
AutoSamplers	SIL-10ADvp	5.32
	SIL-HTA	6.02
	SIL-HTC	6.02
Column Ovens	CTO-10Avp	5.24
	CTO-10ACvp	5.24
	CTO-10ASvp	5.24
	CTO-10A[C]	3.0
Detectors	SPD-10Avp	5.22
	SPD-10AVvp	5.22
	SPD-10Ai	3.0
	SPD-10Avi	3.0
	SPD-10A	3.0
	SPD-10AV	3.0

Devices	Model Number	Version
Valves	FCV-12AH	N/A
	FCV-11AL	N/A
	FCV-13AL	N/A
	FCV-14AH	N/A