

Agilent Purification System, LAB EXERCISE

LAB TITLE

Getting familiar with the Agilent G9309A UV/vis detectors.

Lab Objectives

The purpose of this LAB is to familiarize yourself with the Agilent G9309A detectors repair procedures and diagnostics. These detectors are also known as 325 UV/vis detectors.

The LAB is divided into two parts:

- 1) Module Repair Procedures for the G9309A samplers
- 2) G9309 Sampler Diagnostics



1) Modular repair procedures for G9309 samplers

IMPORTANT: Use the Service Manual and any other instructions in this LAB

- a) Using LCVerify, determine the IP details of the detector:

IP address:.....

Subnetmask.....

Gateway.....

- b) Run a wavescan and save the BLV file to the desktop.
(use the Service How To if unsure)
- c) Un-plumb and un-stack your detector. **Beware of leaking solvents!!!**
- d) Using proper anti-static precautions (in your tool box), open your detector and practice removing the following assemblies:
 - i) Flow cell door, flow cell and fittings
 - ii) Optics module
 - iii) Power supply
 - iv) CPU board
 - v) Cooling fan
- e) Reinstall all assemblies into the unit.
- f) Perform **all necessary** calibrations and list which calibrations you ran:
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- g) Re-stack and configure the detector correctly.
- h) Make detector operational, warm-up lamp, prime flow cell and flush with water.
(plumbing, wiring, communicate with OpenLAB)

2)G933xA diagnostics

- a) Run a flow cell ratio test and enter the value in the firmware using LCVerify
- b) Run another wavescan, save the BLV to the desktop and compare the two wavescans. Are there any differences? Describe here:

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- c) What markers are of great importance when reviewing the wavescan, and why are they?

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- d) Run a Noise Test using a tolerance of 10 μ AU.
- e) Run a Linearity Test setting a tolerance of 2% at 265nm.
- f) Enter the detector diagnostics state and review the Input/ Output diagnostics.