Agilent G9540A RapidFIre 365 System Upgrade for 1536-Well Plates

Installation Checklist

Thank you for purchasing an Agilent RapidFire System. This checklist is used by the installing engineer to ensure that the instrument and associated systems are correctly installed, upgraded, and functioning as designed in your facility. This checklist will be completed at the end of the service and provided to you as a record of the installation.

Introduction

Customer Responsibilities

1 Customers should leave the instrument shipment for the engineer to unpack.

2 Customers should provide all necessary operating supplies upon request of the engineer.

3 A customer representative should be available to the engineer while performing the installation.

4 Some installation tasks will be beneficial to you if you are present – refer to sections in this checklist.

Important Customer Web Links

☐ Videos about specific preparation requirements for your instrument can be found by searching the *Agilent YouTube* channel at https://www.youtube.com/user/agilent

☐ To access *Agilent University*, visit http://www.agilent.com/crosslab/university/ to learn about training options, which include online, classroom and onsite delivery.
A training specialist can work directly with you to help determine your best options.

☐ A useful *Agilent Resource Center* web page is available, which includes short videos on maintenance, quick lists of consumables for new instruments, and other valuable information. Check out the Resource Page here: https://www.agilent.com/en-us/agilentresources

☐ Need technical support, FAQs, supplies? – visit our *Support Home page* at http://www.agilent.com/search/support

☐ Get answers. Share insights. Build connections:
Join the *Agilent Community* at https://community.agilent.com/welcome

Service Engineer's Responsibilities

☐ Only complete/printout pages that relate to the system being installed.

☐ Complete empty fields with the relevant information.

☐ Complete the relevant checkboxes in the checklist using a "X" or tick mark "✔".

☐ Check "Section not applicable" check boxes to indicate services/tasks not delivered, as appropriate.

☐ Complete the Service Review section together with the customer.

☐ Complete the fields for page numbers at the foot of each selected page

☐ Complete the total number of pages field in the Service Completion section

☐ Ask the customer to sign the Service Completion section including the customer's and your signature.

Additional Instruction Notes

❑ This checklist is valid for Agilent G9531A RapidFire 365 Systems.

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Instrument Installation

System Information

❑ Check this box if an instrument configuration report is attached instead of completing the table.

Instrument System Name and ID	
Instrument System Site and Location	

List System Component Product Numbers	List the Serial Numbers of each Component
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Preparation

❑ Unpack/verify the condition and completeness of shipment.
For discrepancies, use the following table:

Product or Part Description	Observation	Action

❑ Discuss any specific questions or issues with the customer before starting.

❑ Discuss any configuration options with the customer before starting.

❑ Check for required service note applicability and firmware updates if connecting to instruments.

❑ **Upgrades only** – Ensure with the customer that instrument control settings, data, methods etc. have been properly saved or archived before starting any installation procedures.

Installation Procedure

❑ Before you start, make sure you have the following:

  ❑ G9540A, RapidFire 365 System Upgrade Kit for 1536-Well Plates:

  ❑ G5557-64001, RapidFire Acquisition 6.0 software

### Installing RapidFire Acquisition Version 6.0.x software

IMPORTANT: The config files associated with software version 5.3 are compatible with version 6.0. However, once the guide needle is changed, all the plate types should be re-taught using the 6.0 version of the .platecfg files and the stage jig.

1 Make a backup copy of the existing config files.

2 Uninstall existing RapidFire Acquisition software on the RF computer.

3 Uninstall existing RapidFire Communicator software on the MS computer.

4 Install RapidFire Acquisition 6.0 software on the RF computer.

5 Install RapidFire Communicator 6.0 software on the MS computer.

6 Copy the .platecfg files from C:\Agilent\RapidFIre\Default Config Files for RF365 to the config file folder that was being used for the earlier software version.

7 Verify you can communicate with the instrument:

  a Start the software and load the config files (either the existing cfg or the ones labeled Default Config Files for RF365 in the newly installed files).

  b Click **Start** and then **Connect** and verify you can connect to the instrument.

Installing the hardware

1   Remove the sipper tube, guide needle, and sample loop and replace with the appropriate smaller tubing and guide needle.

Figure 1 Sipper tube, sample loop, and guide needle
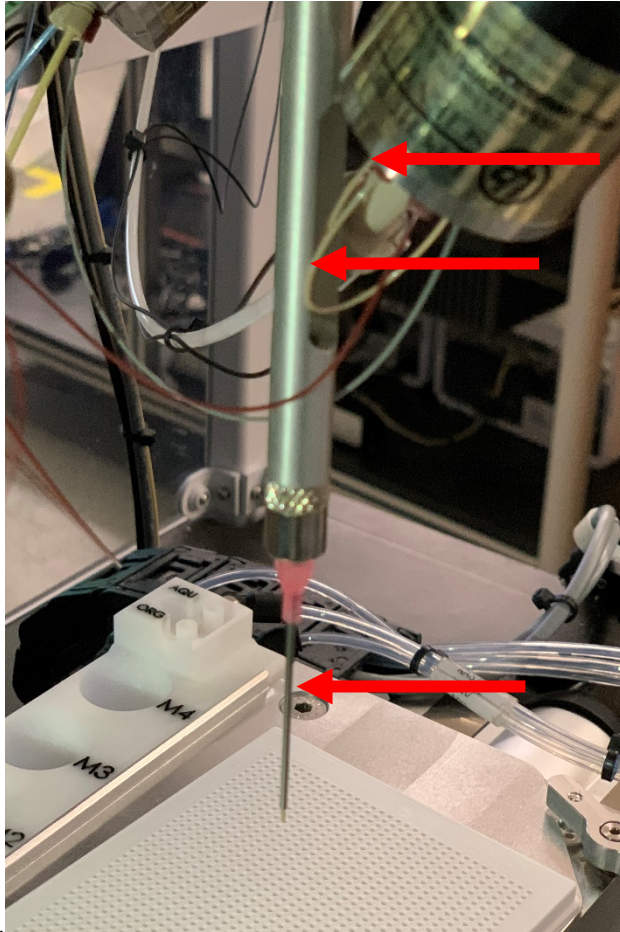
Configuring the system

1   Teach the sipper positions for the 1536-well plate:

   a   Select **System Tools > Sipper Configuration**, select the plate type (1536_Standard_Plate from the **Plate to configure** list, and click **Home**, to home the sipper stage.

   b   Install the stage jig with clip and wire and turn it on.

   c   Set the Sipper Safe Height manually, close the doors and click **Next**.

   d   Follow the instructions in the Sipper Configuration Wizard to set the stage teachpoints. For additional details, see the *RapidFire 400 System Installation Guide* or the *RapidFire 400 System Installation Checklist*.

2 If the customer will be using other plate types, reteach those plates using the stage jig and updated .platecfg files.

3 To avoid over-pressure with the smaller tubing, reset the flow rate for the flush:

  a Close the RapidFire software.

  b Open the RapidFire.cfg file in Notepad and change **FLUSH_PUMP1_FLOWRATE=9;** to **1.5;**.

  ///

  // Amount of time to perform a flush operation in minutes

  FLUSH_WASH_TIME=1.0000000000;

  // Pump 1 flow rate in mL/min during the flush operation

  FLUSH_PUMP1_FLOWRATE=9.0000000000;

  // Pump 1 max allowable pressure in MPa

  FLUSH_PUMP1_MAX_ALLOWABLE_PRESSURE=10.0000000000;

  c Save and close the file.

4 To sip precise small volumes, Agilent recommends disabling the sip sensor:

  a Open the **Sipper.cfg** file in Notepad and change **SIP_SENSOR_PRESENT=0;**.

  b Save and close the file and restart the software.

Verify operation

❑ Run a batch file to verify the mechanics of the system are working correctly.

Installation Checkout (Customer present)

❑ *Section not applicable*

1 Prepare a plate with a known amount of analyte.

2 Run each column of the plate with increasing sip times of 50, 75, 100, 125, 150, 175, 200 ms.

3 Calculate the average peak area of the analyte for each column of sip time to determine the optimum sip time and reproducibility.

4 For additional information, see the Application Note: *Minimization of the Required Sample Volume for Agilent RapidFire 365 High-Throughput Mass Spectrometry Systems*.

Signature Page

Service Review

❑ Attach available reports/printouts to this documentation.

❑ Record the time/date of installation or upgrade completion in the customer's records/logbook.

❑ Complete the following Service Engineer comments section if there are additional comments.

❑ Review the installation/upgrade with the customer.

❑ Explain Agilent warranty for instruments.

❑ Explain how to use manuals, guides, and online help.

❑ Explain how to get self-help, and FAQs online.

❑ Explain how to log an instrument service call and support services that are available.

❑ Advise customer of additional instrument training options.

❑ If the instrument firmware was updated, record the details of the change in the service engineer's comments box or if necessary, in the customer's IQ records.

Service Engineer Comments (optional)

If there are any specific points you wish to note as part of performing the installation or other items of interest for the customer, please write in this box.

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Service Completion

Service request number _____   Date service completed _____

Agilent signature _____   Customer signature _____

Total number of pages in this document _____