October 2025

Release Note: QIAcuity® Instrument CSW (v.3.1.3)

The QIAcuity instrument Control Software (CSW) version 3.1.3 is now available for download and installation.

Upgrading to the latest QIAcuity Software version 3.1 requires upgrading the QIAcuity Software Suite to version 3.1.1 and the QIAcuity CSW to version 3.1.3.

New common features of versions 3.1, 3.1.1, and 3.1.3

- The QIAcuity Software supports dPCR assays up to 12-plex using amplitude multiplexing. In addition to the six optical channels available, this option enables two amplicons to be detected in the same channel.
  Note: This feature requires the use of a new master mix (QIAcuity High Multiplex Kit). dPCR assays up to 5-plex are still supported using all other available QIAcuity probe kits. In addition, a custom cross talk matrix is strongly recommended when using the amplitude multiplexing mode.
- A new functionality for the integration of a QIAcuity Lab Automation Service allows third-party lab automation software to control robotic devices to interact with the QIAcuity system, run dPCR experiments, and analyze results without any human interaction.
  Note: For more guidance, please refer to the *QIAcuity Lab Automation Service User Guide* (**www.qiagen.com/HB-3537**) available on the QIAcuity webpages.

Improvements of versions 3.1, 3.1.1, and 3.1.3

- The default settings of the imaging parameters were updated in alignment with the new High Multiplex reaction mix.
- Automatic error clearing during the run for Griparound error 177 handling might occur on the drawer, the priming/rolling module, and the thermocycler module. Previously, this error stopped the run and the error had to be cleared manually to resume operations. Rather than stopping the run immediately, the system will now automatically resume the handler position and attempt to retrieve the plate. The error will eventually display for the user to clear after three unsuccessful attempts. This process reduces interruptions and enhances system workflow continuity.
- The QIAcuity system time is now displayed on the instrument user interface.

Improvement of version 3.1.3

- Reliability improvement of the partitioning module

Bug fix

- In the CSW version 3.0 on multiplate instruments (QIAcuity Four and QIAcuity Eight), once a plate was loaded, the **Run all** button was disabled while the **Play** buttons for each plate slot were not affected. The **Run all** button is now available starting with the CSW version 3.1.

Updating the instrument CSW

The upgrade to this CSW version may be performed directly from the CSW v3.1.1.21, v3.1.0.41, v3.0.0.27 and CSW v2.5.0.24.

Caution: All versions older than CSW version 2.5.0.24 are not supported for a direct upgrade to CSW version 3.1.3. For upgrade instructions, refer to the corresponding sections in the user manual.

Note: The latest CSW version 3.1.3 is only compatible with Software Suite version 3.1.1. If only one software component is updated, no connection between the Software Suite and the CSW can be established.

Important: In case both, Software Suite and Control Software need to be updated, it is strongly recommended to update the Software Suite first before proceeding with the Control Software update.

Note: Only users with an Administrator or Lab leader role can perform software updates.

Visit **www.qiagen.com** and go to the **Latest Software Version** section under the **Resources** tab of the QIAcuity product page to check for the latest CSW version and the latest user manual. On a computer running Microsoft® Windows®, download the software from **www.qiagen.com**. Insert the USB drive provided with the QIAcuity, create a new folder named “update”, and extract the software into this folder. Insert the USB drive into the QIAcuity instrument and follow the instructions in the user manual to perform the update.

Known issues of the instrument CSW versions 3.1, 3.1.1, and 3.1.3

- For the **Run/Run all**, **Test connection**, and **Save** buttons on the Software Suite **Configuration** tab, the spinner is missing while the corresponding action is in progress.
- If there is not enough disk space for the CSW update, a misleading error message is displayed (“*Error 26: The data could not be copied to/from USB drive. Try again.*” instead of “*Error 21: There is no enough space on the Instrument to proceed with the update. Delete temporary data to free up some disk space. Contact your local administrator for assistance. If the problem still exists, please contact QIAGEN Technical Services.*”). Ensure that enough disk space is available before starting the CSW update.
- In case of insufficient disk capacity on the Software Suite instance, no images of the QIAcuity instrument can be sent to the Software Suite and the images are not automatically sent to the Software Suite instance after the disk capacity has been restored. However, the affected plate can be reimaged after the storage space on the Software Suite laptop has been made available.
- In rare cases for QIAcuity Four and QIAcuity Eight instruments, the time estimation of an individual process step of a plate might be inaccurate. However, the overall plate run process time is displayed correctly.
- In case a run was aborted manually during the imaging step, the sent response to the Software Suite and to the QIAcuity Lab Automation Service (robot API) for the imaging step status is “Completed” instead of “Cancelled”.
- In case the QIAcuity Lab Automation Service (robot API) performed a run and the run was aborted manually during the priming step, a notification about error 250 is displayed on the user interface, but the error status of the API request is still 0.