# Chromium Connect Software Release Note

FOR USE WITH

Chromium Connect, PN-1000171 Chromium Connect, PN-1000180



### **Notices**

### **Document Number**

CG000352 • Rev N

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# **Chromium Connect Software Release Note**

Item	Description
For Use With	PN-1000171 Chromium Connect PN-1000180 Chromium Connect
Software Version	V2022.12.30
Software Release Date	December 2022
Compatibility	Chromium Connect Instrument
Features	<ol> <li>New manual barcode data entry popup screen</li> <li>All assay workflows now dispense a fixed amount of library volume for all channels</li> <li>New popup warning screen when selecting "Expert" or "Advanced" instruction levels</li> <li>New assay setup loading data from previously cancelled run during loading phase</li> <li>New remote support activation/deactivation screen</li> </ol>
Bug Fixes & Changes	<ul> <li>6. HEPA fans activated during all maintenance runs</li> <li>7. Improved device connection error handling defects</li> <li>8. Improved assay run screen displays timers based upon variations in number of samples and thermal cycling</li> </ul>

### Item Description

### Previous Software Version V2022.09.30

### Features

- 1. New assay start notification to insert all carriers on the deck
- 2. Network Connection Screen allows for network adapter display and option to disconnect from Wi-Fi

- 1. User instructions to unload the deck incorrectly indicate to unload the chip from a carrier
- 2. Error message incorrect for "Oil tube" Deck Check
- 3. Import of CSV file defects

### Item Description

### Previous Software Version V2022.06.29

Additional specifics:

Chromium Automated Controller V4.1.0 (FW 4.0.1, TEC FW 1.5.0)

Chromium Connect User Interface V1.31.5.6

Chromium Connect Automated Assays: Build 669

Hamilton Nimbus8 Software Version 2.1.4 rev B SP2

Hamilton Nimbus8 Firmware Version 2.1.3 SP1

Software Released: June 2022

### Features

- 1. User Guides available on-instrument via 'Help' menu
- 2. User may select previous run setup via search function, use variables from previous run design
- 3. Unavailable options grayed out on user interface if component is not present (i.e. HEPA fan not installed)
- 4. cDNA input volumes user-controlled in library preparation setup
- 5. Add local drives other than C:\

### **Bug Fixes & Changes**

1. Import of CSV files do not transfer volume information to Automated Single Cell 5' GEX Library Constructions setup

### Previous Software Version V2022.03.30

Additional Specifics:

Chromium Automated Controller V4.1.0 (FW 4.0.1, TEC FW 1.5.0)

Chromium Connect User Interface V1.30.3.6

Chromium Connect Automated Assays: Build 606

Hamilton Nimbus8 Software Version 2.1.4 rev B SP2

Hamilton Nimbus8 Firmware Version 2.1.3 SP1

### Software Released: March 2022

### Features

- 1. New Single Cell 5' Feature Barcode Library Construction Kit
- 2. Add "Resuspend Dynabeads" information to Load Sample Plate screen(s)
- 3. Disable/enable Assay Kits
- 4. Enhancements to instrument user interface Run screen information display
- 5. User interface Run Report list updated to include color codes to specify status(Red ERROR; Yellow CANCEL/ABORT; Green SUCCESS)
- 6. New user interface screen image (10x Genomics Logo) viewer and image exporter

### **Bug Fixes & Changes**

- 1. Power cycling instrument failure fix to allow user to run assays
- 2. Automated Single Cell 3' and 5' Library Construction assay failure to run immediately after software installation
- 3. User interface invalid numeric input data does not properly display text and error indicator

### Previous Software Version V2022.01.14 Software Released: January 2022

- 1. Power cycling instrument failure fix to allow user to run assays
- 2. Automated Single Cell 3' and 5' Library Construction assay failure to run immediately after software installation
- 3. User interface invalid numeric input data does not properly display text and error indicator

### Previous Software Version V2021.12.14 Released: December 2021

### Features

- 1. New Chromium Next GEM Automated Single Cell 3' v3.1 & 5' v2 cDNA and Library Construction Kit and \_\_workflow compatibility
- 2. Automated universal Library Construction workflow
- 3. Increase in library pooling capability (8 to 32) and the number of pools to populate (1 to 6)
- 4. Comfort Lid quantity reduction for assays

### Bug Fixes & Changes

- 1. Email notification improvements
- 2. Additional error recovery
- 3. LIMS workbook update for duplicate Sample Index entries

### Previous Software Version V2021.09.28 Released: September 2021

### Features

- 1. Chromium Next GEM Single Cell 3' v3.1 Gene Expression Automated workflow supports Dual Indexing
- 2. Assay run Pause button disables during critical sections of the workflow
- 3. Instrument controlled HEPA operation availability
- 4. HEPA Fans turn ON after Setup phase of workflow
- 5. New status bar indicators for network and remote server connection

### Bug Fixes & Changes

1. Improvements in user interactive error recovery situations

### Previous Software Version V2021.05.27 Released: May 2021

### Features

- 1. Updated for Chromium Next GEM Single Cell 5' v2 assay
- 2. Prevents selection of inaccessible Gel Bead wells
- 3. New Run Setup Confirmation screen

### **Bug Fixes & Changes**

1. Invalidates improperly formatted email address entered by user

### Previous Software Version V2021.03.31 Released: April 2021

### Features

- 1. Instrument login status
- 2. Pause Button warning to indicate that the run may abort if instrument is paused
- 3. Updated LIMS import to assay template files

### Bug Fixes & Changes

- 1. Anti-droplet Control (ADC) channel failure terminates assay
- 2. Troubleshooting package failure to include all data
- 3. Data transfer handling of Software Upgrade program from a USB
- 4. Control Panel failure when executing Thermal Cycler "Run protocol"
- 5. Incorrect recovery dialog appears when a Carrier "break" sensor error is detected
- 6. If a run is cancelled, screen prompts the user to remove Chip from the Automated Chromium Controller
- 7. Messaging update to Tip pickup failure error handling

### Previous Software Version V2020.10.07 Released: October 2020

### Features

- 1. Loading of pipette tip racks scales with number of samples
- 2. LIMS Output to include a run result field (i.e. SUCCESS | FAILURE | ABORT)
- 3. Screen display to indicate status of Chromium Connect Software update

- 1. HEPA light remains ON during a run
- 2. cDNA no longer aliquoted to TS-1 when mid-run QC is skipped
- 3. Updated maintenance screens
- 4. Pre-run deck check ensures Waste Bar is present
- 5. Repetitive prompt to refill pipette tips removed
- 6. Wraparound selection of SI wells now compatible with the assay
- 7. Secondary Assay transition corrected to proceed with beginning or end of run inputs

### Previous Software Version V2020.07.31 Released: August 2020

### Features

- 1. Chromium Automated Controller Firmware update (v4.1.0) integrated into Chromium Connect Software update
- 2. Software integration for HEPA CAP hood functionality
- 3. Capability to export barcode information into LIMS and run audit logs
- 4. Added LIMS compatibility for qPCR and Pooling

- 1. Updated User Interface screens for general consistency of language and formatting
- 2. Added sound notification for GEM Check Timer
- 3. Minor bug fixes to user interface and barcode scanning
- 4. Added ability to remove network drives in menu settings
- 5. Enabled data purging off storage databases
- 6. Easier access to waste bin during maintenance
- 7. Pooling assay accepts sample input