



Agilent 7820 GC Firmware

Release Notes – Revision A.01.18.007

Notices

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Firmware/Software Revision

This guide is valid for the A.01.18.007
revision of *Agilent 7820 GC Firmware*

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Document History

The table below lists all changes that have been made to this document.

Date	Revision	Description
26 th July 2023	Rev A.01	Initial release (A.01.18.006 Release Note)
26 th January 2024	Rev A.02	Added A.01.18.007 Release Note

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Introduction

The purpose of this document is to provide users of the Agilent 7820 GC system guidance to relevant support documentation that contains further levels of information and detail

Table 1 Terms and abbreviations used in this document

Terms	Description
SSB	Software Status Bulletin
CDS	Chromatographic Data System
U	Update
SP	Service Pack
HF	Hotfix
SR	Service Release
[xx]	Final Build Numbers of a released product
DSA	Data System Adapter

For our Regulated Customers

When any change is made to Agilent software/firmware, the validation status of the software needs to be re-established by the user/customer.

Whenever software/firmware is changed, a validation analysis should be conducted to validate an individual change and determine the extent and impact of that change on the entire system.

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Compatibility

Supported Agilent Data Systems

OpenLab CDS (2.8, 2.7, 2.6, 2.5)

OpenLab EZChrom (A.04.10 Update 2)

OpenLab Chemstation (C.01.11, C.01.10, C.01.09)

GC/MS MassHunter Acquisition (10.2)

Supported Agilent GC Driver

Agilent GC Driver (4.0)

Agilent GC Driver (3.9, 3.8, 3.7– Limited Support)

4 Support Information

- Agilent recommends using always the latest firmware revision of a firmware in order to avoid interoperability issues.
- Generally, Agilent recommends keeping the GC instrument firmware always current.

Notes for Agilent 7820 controlled by non-Agilent Chromatography Data Systems (CDS)

- The 3rd-party CDS software vendor is responsible for compatibility testing with the respective CDS revision.
- The 3rd-party CDS software vendor defines the minimum firmware revision required for CDS compatibility.
- The 3rd-party CDS release notes issued by the respective CDS vendor may use different terminology for the firmware requirements such as "tested firmware", "supported firmware", "firmware requirements", "minimum tested firmware", etc.

OO/PV - Validation Information

- If a firmware upgrade has been performed, normally no revalidation of the module/system is required. This is stated in the released Service Note applicable to the release.
- In addition, this information is stated further on in this document.



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Agilent 7820 GC System – What's new?

What's new in 7820 GC firmware A.01.18.007?

- Remove Russian from 7820 GC FW

6 Resolved Issues in revision A.01.18.007

The current shipping firmware for the 7820 is A.01.18.007

Released on 26th January 2024

<https://download.chem.agilent.com/firmware/7820.A.01.18.007.bin>

To download this version, use GC Firmware Update Tool 2.9.9.0 or greater.

Updating to this firmware does not require instrument revalidation.

Service Note Number: D0109688

Resolved Issues:

Table 2 Resolved Issues (Agilent 7820 GC System A.01.18.007)

Issue ID	Current Behavior	Resolution
045149	FID H2 is not shutting off after GC run with "inlet pressure shutdown" occurred during a run	Resolved
045310	7820A doesn't turn the H2 off if the FID air decays slowly after a run	Resolved
PLCACSW-270	Untranslation: Sample Tray Installed information in 7820 Firmware	Resolved
PLCACSW-303	Untranslation: Not installed message for no Tray installation in 7820 FW	Resolved
PLCACSW-305	Untranslation: Inlet calibration value title in 7820 FW	Resolved

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Previous Versions

This section details previous versions of 7820 firmware giving release notes.

A.01.18.006 Firmware

Released on 26th July 2023

Service Note Number: D0034878

Enhancements:

- Optimize the international language package size

Fixed defects:

Issue ID	Current Behavior	Resolution
027180	GC does not turn the FID H2 off if the air decays slowly	Resolved
041497	Unable to turn off FID High Voltage for DET maintenance	Modified
041594	Gas saver is not recorded in activity log	Resolved
042993	Max SSL total flow limitation doesn't work	Resolved
043831	FID baseline drops when run is started	Resolved

A.01.18.004 Firmware

Released on 9th April 2021

Service Note Number: D0009232

In order to support FPD+ (EPR) and ECD (EPR) detectors which are newly developed in 7820A VL GC, the 7820A GC firmware has been revised to A.01.18.004.

There is no defect fixed with this firmware release.

Firmware version A.01.18.004 is fully backwards compatible for 7820A GC.

A.01.18.003 Firmware

Released on 1st March 2018

Service Note Number: 7820A-064



Enhancements:

- Merge Russian language into common 7820 firmware, now 7820 firmware supports ENG/JPN/CHN/RUS. When switched to Russian, only the HW LUI is in Russian, the SW keypad still displays in English.
- Upgrade ALS Controller firmware to A.02.18.

Fixed defects:

- TT 269965 Inlet configurations shown in DA Express is incorrect.
- TT 027543 PCM should be allowed to coexist with inlet EPR.
- TT 028244 when a PCM is installed as an inlet, no PCM is displayed on the DA Express.

Requalification of the 7820 GC is not required after this firmware.

A.01.18 Firmware

Released on 18th October 2016

Service Note Number: 7820A-058

Enhancements:

- Support 7820 EPR (Electronic Pneumatics Regulation) Inlets, including Packed Column Inlet (PCI) with EPR, Split Splitless(SSL) Inlet with EPR, Flame Ionization Detector (FID) with EPR and Thermal Conductivity Detector (TCD) with EPR.
- Support 7820 DA Express (Data Analysis Express). It is bundled with G4350C for China only.

Fixed defects:

- TT 024090 The "column flow" displayed on LCD is incorrect. It shows "split flow + column flow" instead of the "column flow".
- TT 025882 Untranslation: "Flow" is not translated in Column on software keyboard.

Requalification of the 7820 GC is not required after this firmware update.

A.01.17.004 Firmware

Released on 18th February 2016

Service Note Number: 7820A-054A

Enhancements:

- Support 7820A SSL_100psi Inlet.



-- Support Bypass TCD Filament in Runtime Events.

Fixed defects:

- TT 023155 COC EPC Auto Zero Septum Purge should be "on" by default.
- TT 023156 GC keeps beeping but will be not shown "COC septum purge flow is not ready" , customer confused.
- TT 023232 cannot run a single sample with Mini TD as the injection source
- TT 024288 the maximum temperature of COC inlet is inconsistent with 7820 GC specification.

A.01.15.012 Firmware

Released on 9th September 2015

Service Note Number: 7820A-048A

Enhancements:

- Support FPD plus on GC 7820A.
- Support COC Inlet on GC 7820A.
- TT 019699 Back Inlet heating zone can be used for valve box heater.

Fixed defects:

- TT 019404 The FID hydrogen gas does not turn off when air slowly shuts down.
- TT 015613 PPIP inlet pressure displays "0" and column1 flow is not present on LED .
- TT 020430 Japanese strings displayed on the Software Keyboard are garbled.

A.01.12.005 Firmware

Released on 11th April 2013


Service Note Number: 7820A-040A

Enhancements:

- Update ALS controller FW to A.02.15
- Improve the solution to fix the problem "Thermal Shut Off" on the small zones (inlets/detectors/Aux) per 25 days running.

Fixed defects:

- TT017681 when run Mini TD conditioning mode the tube temperature must start from the on line sampling initial temperature.



A.01.12.004 Firmware

Released on 30th January 2013

Service Note Number: 7820A-037A

Enhancements:

-- Support 7667A (G4370A Entry Version G4370M Enhanced Version).

Fixed defects:

-- TT 017699 7820 GC Thermal Shut Off happened per 25 days running.

A.01.12.003 Firmware

Released on 1st June 2012

Service Note Number: 7820A-033A

Enhancements:

-- Support 7650A (50 sample position Autosampler).

-- Support new detector EPC module (The new EPC module will be released on Jul 1st).

Fixed defects:

-- TT 015204 7820A uECD makeup cannot be controlled when configure gas type as Ar/CH₄

-- TT 015267 Remove the display of column compensation from Virtual Keyboard

-- TT 015402 Virtual Keyboard Sequence is misspelled

-- TT 015614 Some 7820A EPCs septum purge flow shows negative value

-- TT 016036 ECD flow displayed in Chemstation software and VFD is not as same as the set point

-- TT 016037 The error message for Lite EPC configuration is not clear

-- TT 016087 Translation issue on Chinese UI of Virtual Keyboard

A.01.12.002 Firmware


Released on 4th December 2011

Service Note Number: 7820A-031A

Fixed following defects:

TT#013195 7820GC column velocity shows incorrect value on LCD.

TT#015458 7820GC FPD Lite EPC shows 'not configured'.



A.01.12.001 Firmware

Released on 15th September 2011

Service Note Number: 7820A-030A

Enhancements:

Enhance ALS performance

Support FPD detector

Fixed following defects:

TT#13194 H2 flow won't turn off when ignitor open/short.

TT #14608 "Thermal Shutdown" while cooling oven from higher temperature to 250C

TT #14764 Allow 0 length column for packed column configuration

TT#13317 GC7820 only has two valve actuators but 4 valves can be configured in Chemstation B.04.03.

TT#13195 Column velocity showed 0 on 7820 LCD display

TT#14361 GC7820 uECD actual make up flow shows 90% percent of setting value

TT#14510 Items (MFR date Oven type Detector EPC configuration Lite EPC etc.)

will be reset to default value after FW update

TT#014509 EPC3 and EPC4 are used for F Det and B Det but item "lite EPC" shows that EPC1 and EPC2 are used for detectors.

Fix issue: Default method is loaded automatically when open

chemStation/Ezchrom Elite. Customer wants to load the last used method.

A.01.11.001 Firmware

Released on 21st November 2010

Service Note Number: 7820A-017

the key Features is:

-- Support Tray

-- Support Russian language for MSD transfer line

-- Fix method operation issue without ALS controller

-- Fix Japanese language translation for MSD transfer line

-- Fix TT #104 defect, add subnet mask information on hardware display panel

-- Enhance ALS performance

-- Update for EVA project

-- Upgrade MMON to 4.10 version

A.01.10.013.1 Firmware

Released on 4th March 2010



Service Note Number: 7820A-006

New firmware supports MSD heating zone configurations.
Versions: A.01.10.013.1.bin - English, Chinese and Japanese languages.
A.01.10.013.Ru.bin - Russian language.

New firmware features:

1. For Single Channel Systems Back Inlet heating zone can be configured as MSD transfer line.
2. For Dual Channel systems AUX Heating zone can be configured as an MSD transferline.
3. Actual FID signal value is visible on the GC display panel



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