

Improvements to HELEOS[®] II / TREOS[®] / μDAWN[®] / TREOS[®] II Firmware

INTRODUCTION

This document highlights the most important enhancements, changes, and bug fixes made to the Wyatt Firmware. Please contact us at support@wyatt.com if you have any questions or suggestions.

CONTENTS

Introduction.....	1
Version History.....	2
2.6.2.4.....	2
Improvements and Bug Fixes.....	2
2.6.2.2.....	2
Improvements and Bug Fixes.....	2
2.6.2.1.....	2
Improvements and Bug Fixes.....	2
Known Deficiencies.....	2
2.6.1.14.....	3
Improvements and Bug Fixes.....	3
Known Deficiencies.....	3
2.6.1.11.....	3
Improvements and Bug Fixes.....	3
2.6.1.7.....	3
Improvements and Bug Fixes.....	3
2.4.3.21.....	3
Improvements and Bug Fixes.....	3
Known Deficiencies.....	4

2.4.3.9.....	4
Improvements and Bug Fixes	4
Known Deficiencies	4
2.4.3.2.....	4
Improvements and Bug Fixes	4
Known Deficiencies	4
2.4.2.0.....	5
Improvements and Bug Fixes	5
2.4.1.2.....	5
Improvements and Bug Fixes	5
2.4.0.4.....	6
Improvements and Bug Fixes	6

VERSION HISTORY

2.6.2.4

Improvements and Bug Fixes

- Added a security update to further ensure that your instrument is not susceptible to network-based malware. (#19698)

2.6.2.2

Improvements and Bug Fixes

- Modified firmware updater so that antivirus scanners do not report false positives when scanning the updater. (#18550)

2.6.2.1

Improvements and Bug Fixes

- The dark offsets of TREOS II and uDAWN instruments are now automatically zeroed during the first 20 seconds after boot up. (#17832)

Known Deficiencies

- In instruments manufactured before September 2016, the system clock may shift by one hour

on reboot when then time has been set near a daylight savings time transition. (#14960)

2.6.1.14

Improvements and Bug Fixes

- Setting the instrument's date and time has been made easier. (#14980)
- Toggling APD or Dither to "ON" now causes the laser to leave idle mode. (#16879)
- Fixed a problem where the "Service..." button would not respond to the keypad. (#17055)
- The heated line temperature is now greyed out when "Sync" is checked in the System tab. (#17129)

Known Deficiencies

- In instruments manufactured before September 2016, the system clock may shift by one hour on reboot when then time has been set near a daylight savings time transition. (#14960)
- The dark currents can shift in the hardware of a TREOS II when the instrument is rebooted which can lead to incorrect molar mass results. The problem can be corrected by zeroing the dark offsets from the instrument front panel after reboot. (#17832)

2.6.1.11

Improvements and Bug Fixes

- Disabled features that are incompatible with HELEOS II, TREOS, and uDAWN models older than WUDAWN-03. (#16880)

2.6.1.7

Improvements and Bug Fixes

- Added Maintenance button to Alarm page which allows you to view and perform maintenance tasks. (#15702)
- Added a Noise indicator on the main tab which displays the instrument's current noise level. (#16333, TREOS II only)
- Added Vapor to the source drop downs on the Main tab. (#16216, TREOS II only)
- Added the Service menu which is accessible from the System Page. The Service menu is useful to change Vapor Sensitivity, Noise Analysis Sensitivity, and view System Information. (TREOS II only)
- Added ability to enable/disable Cold Room Mode. (#15329)

2.4.3.21

Improvements and Bug Fixes

- You can now configure IP settings in the **Comm** tab without an active Ethernet connection, and they will remain once connection is restored. (#14053)
- For certain hardware configurations, if there was no active Ethernet connection the **Comm** tab

would become unresponsive. (#14053)

- You will no longer see the “Out of Virtual Memory” error message when a WyattQELS module (a.k.a. DLS) is installed and the APD detector is off. (#14054)
- Added support for new instrument operating system. (# 14777)

Known Deficiencies

- We have had a few reports of instruments falling into idle mode during a collection (in both ASTRA V and ASTRA 6). To help diagnose the problem, this firmware version adds additional logging. If your instrument goes into idle mode during a collection, please call Wyatt customer service.

2.4.3.9

Improvements and Bug Fixes

- Added support for new Single Board Computer and touchscreen hardware configurations. (#13052, #13085)
- Added support for the μ DAWN instrument. (#13058, #13482, #13508, #13561)

Known Deficiencies

- On rare occasions we have observed an issue that can cause the firmware to present a “Running low on virtual memory” warning dialog. The instrument may refuse connections from ASTRA as well. We have made modifications that should correct this problem, but we are still investigating the issue.
- We have had a few reports of instruments falling into idle mode during a collection. This has been observed with both ASTRA V and ASTRA 6. We have not been able to reproduce this problem in-house, but we have obtained files from customers that demonstrate the issue. This new firmware version adds additional logging so that we can track and diagnose the problem. If you observe your instrument go into idle mode during a collection, please call Wyatt customer service.

2.4.3.2

Improvements and Bug Fixes

- Corrected a communication error with the WyattQELS hardware that could cause the unit to stop sending data. This could be observed by the QELS tab on the instrument front panel freezing and no longer updating. (#12068)

Known Deficiencies

- On rare occasions, we have observed an issue that can cause the firmware to present a “Running low on virtual memory” warning dialog. The instrument may refuse connections from ASTRA as well. We have made modifications that should correct this problem, but we are still investigating the issue.
- We have had a few reports of instruments falling into idle mode during a collection. This has

been observed with both ASTRA V and ASTRA 6. We have not been able to reproduce this problem in-house, but we have obtained files from customers that demonstrate the issue. This new firmware version adds additional logging so that we can track and diagnose the problem. If you observe your instrument go into idle mode during a collection, please contact Wyatt customer service.

2.4.2.0

Improvements and Bug Fixes

- Corrected an issue that could cause the alarm output line on the back panel to be enabled during startup. The alarm output would remain active even though there were no alarms on the instrument. (#11950)
- Corrected an issue that would cause an error dialog to be displayed at shutdown if no QELS device was present. (#11798)

2.4.1.2

Improvements and Bug Fixes

- Implemented improvements to the instrument Firmware Updater (#10581, #10708, #10733)
- For newer instruments, the updater will automatically restart the instrument to complete the firmware upgrade process. Note: if the instrument doesn't restart the user still must manually restart via the front panel.
- Fixed an issue with the QELS autocorrelation function that resulted in an incorrect hydrodynamics radius measurement when using ASTRA V (#10605).
- This was due to the autocorrelation function being shifted to the right by two data points. This could affect Rh measurements by up to 5%.
- Corrected an issue that caused the laser power to repeatedly loop from 0% to 100% when starting up with the laser off (#10284).
- Fixed an issue that could cause the QELS integration time to take longer than specified on early HELEOS I instruments. The specified integration time now matches the actual integration time (#10339).
- Fixed an issue that would cause QELS data timestamps to jump forward by 1.2 hours on rare occasions (#10360).
- On rare occasions the front panel of the instrument would start updating rapidly and there would be a large jump in the data trace in ASTRA.
- Addressed an incorrect laser monitor alarm at startup (#10286).
- The user would previously observe the front panel chart appear and the alarm box remain yellow for several seconds.
- Laser monitor alarms have been changed to "critical" priority (#10754).
- Previously, laser monitor alarms would only show up as a yellow "caution" alarm on the front panel. They are now "critical", resulting in a red alarm and an audible instrument alert.

2.4.0.4

Improvements and Bug Fixes

- Added an instrument “idle mode” that reduces laser power to 70% on the HELEOS II and TREOS instruments when they are not in use. (#9563)
- Added the ability to allow the instrument to enter idle mode using a checkbox on the System tab. (#9853)
- Corrected a touchscreen issue that prevented navigation with the keypad. (#9698)

Copyright © 2020 Wyatt Technology Corporation. All rights reserved.

Please contact Wyatt Customer Support if you need more information about changes in earlier versions of the firmware.