

# ViscoStar™ / ViscoStar II™

## Version 3.3.0.4

April 10, 2013

**PLEASE READ THIS DOCUMENT  
BEFORE USING THIS SOFTWARE**

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Although this product has been tested, the possibility of undiscovered fatal errors remains. Known deficiencies and limitations are listed below.

Please tell us about any defects or anomalies you discover (check the list of known defects below before you call). Your phone call or email will alert us to a problem and we appreciate your help improving the quality of the software for you and all other users. When making a report, please include complete information regarding the steps leading up to the problem and any error messages (screenshots) displayed by the application or Windows.

Email : [support@wyatt.com](mailto:support@wyatt.com)

Phone : (805) 681-9009 Monday - Friday 8am - 5pm (Pacific).

Wyatt Technology Corporation  
6300 Hollister Ave  
Santa Barbara, CA 93117

### **HARDWARE REQUIREMENTS**

Windows 8 Professional or Ultimate, Windows 7, Vista, or XP computer with networking (for distribution delivery and client support)

### **INSTRUMENT REQUIREMENTS**

Any ViscoStar or ViscoStar II instrument

### **INSTALLATION INSTRUCTIONS**

1. Establish a network connection from the computer to the ViscoStar using one of the following:
  - Ethernet crossover cable
  - Local area network
  - Ethernet to USB converter
2. Run the firmware update program, and follow the onscreen instructions.

### **VERSION HISTORY**

3.3.0.4 April 10, 2013  
3.3.0.2 October 30, 2012  
3.2.1.1 June 8, 2012  
3.2.0.5 April 29, 2008

3.2.0.4 March 28, 2008  
3.2.0.3 March 5, 2008  
3.2.0.2 November 16, 2007  
3.2.0.1 April 19, 2007  
3.1.2.0 October 6, 2005  
3.1.1.0 June 8, 2005  
3.1.0.0 April 6, 2005  
3.0.0.1 July 20, 2004  
3.0.0.0 July 15, 2004

## CHANGE HISTORY

3.3.0.4

- Corrected a touchscreen issue that prevented navigation with the keypad. **(#9701)**
  - Corrected an issue that prevented the touchscreen calibration utility from being visible. **(#9702)**
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3.3.0.2

- Added support for corrosion resistant transducers. **(#9391)**
  - Improved configuration file handling to prevent file corruptions. **(#2585, #9430)**
  - Double tapping the chart no longer launches a non-functional chart editor. **(#8992)**
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3.2.1.1

- Added firmware support for touchscreen instruments. **(#8412, #8520, #8564, #8644)**

Corrected configuration file name that could cause instruments to not boot up. **(#7705)**

Improved firmware update process. Instrument network information is now displayed during the upgrade process. **(#4182)**

- Fixed an issue where the instrument could crash if the auto-inject signal is "Closed" and the Zero Upon Auto-inject is enabled. The instrument now boots up in this scenario. **(#4154)**
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3.2.0.5

- Changed the Auto Inject marker color to green, which appears on the instrument's Front Panel when an Auto Inject signal is received.
  - Revised the Auto Inject behavior to only trigger collections on the rising edge of the signal.
  - Recycle valve is always set to the RECYCLE position at instrument startup.
  - Changed version number label to state "Firmware version".
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#### 3.2.0.4

- Reversed polarity of the Recycle output line to match Orbit requirements.
  - Revised the Waste/Recycle user interface to clarify valve operation, display “Recycle” when valve is in recycle state and display “Waste” when valve is in waste state.
  - Fixed an issue where the instrument sends malformed data to ASTRA every 30 seconds.
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#### 3.2.0.3

- Added support for new front panel single board computer.
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#### 3.2.0.2

- Initial support for ViscoStar II
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#### 3.2.0.1

- The 'Escape' key on the front panel now moves the focus to the tab bar.
  - Instrument initialization and communication was made more robust
  - The Ethernet Configuration was improved. The user interface was modified. An instrument reboot is no longer required when the user modifies the Ethernet configuration.
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#### 3.1.2.2

- A temperature control bug was inadvertently introduced into 3.1.1.0 which caused the temperature to oscillate with 2C amplitude when set near 60C. This has been corrected.
- The temperature control algorithm was modified to reduce overshoot near 0 and 60C. The thermal bench was retuned to provide better stability.
- The firmware now enforces a maximum temperature ramp of 2 C/min. Slower ramp rates may be set from the command SetTemperature. When the temperature is set by the front panel it resets the ramp rate to 2 C/min.
- Minimum scale ranges are now set on the graphs on the main page. This is a cosmetic change that prevents the autoscale code from blowing up small changes to fill the screen. This can be over-ridden with the manual scale option
- The time set button on the system page had a bug that caused the default time to be off by 1 hour during “daylight” savings time. Daylight savings time processing has been disabled. The instrument retains no time zone information.
- The watchdog timer software now retains a log file to aid in debugging.
- Modified the network handling so that hung clients cannot crash the instrument.
- Turned on ISI and watchdog timer error logging files and set up to keep last 1000 lines for failure analysis.
- Changed System page “Time Constant” field to read “Time Interval”. The time interval is defined as the time between consecutive data points. The Time constant is now set to 2\*Time Interval to be consistent with the other instruments.
- Switched to the ISI from Astra 5.1.3.0 to improve overall system stability.
- Modified the ISI to better protect the active instrument list. This improves stability when multiple processes are accessing the list. This occurs during sample set runs and when starting multiple Diagnostic Manager sessions.

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### 3.1.1.0

- After some instruments were updated with 3.1.0.0, a timing bug would cause the watchdog timer to reboot the instrument repeatedly. This timing bug was corrected.
- A bug caused the time setting button on the system page to display the incorrect time. The front panel displayed the correct time. This has been corrected. Now both the time on the system page and the front panel agree.

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### 3.1.0.0

New ISI has been installed to improve stability. Bug associated with daylight saving time caused instrument time to increment one hour upon each reboot has been fixed. Internal USB support has been dropped in favor of an external Ethernet->USB adapter. Minor cosmetic changes have been made. Improved checksum of configuration file was implemented

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### 3.0.0.1

Requirements specified that when a hazard condition occurs (vapor leak, liquid leak, over-temperature, or external alarm input detected), the external alarm should be set. This did not work properly. The new version corrects this problem.

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### 3.0.0.0

Initial Release (Internal use only)

## **KNOWN DEFICIENCIES**

If Astra crashes, it can cause the instrument to reboot.