Overview

This document provides a compilation of Release Notes that have been published by Industrial Scientific. Table 1. Document Summary provides a list of version numbers, release dates, and a brief overview of each Release Note document. Following Table 1, you will find a copy of the complete version of each document.

Document Summary

Table 1. Release Notes Document Summary

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Version</th>
<th>Release Date</th>
<th>Summary of Features Added and Issues Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSX-L Docking Station</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software v. 9.8</td>
<td>V9.8</td>
<td>6/29/2018</td>
<td>Update 9.8 includes minor enhancements and bug fixes, including an improvement to manifolding.</td>
</tr>
<tr>
<td>Software v. 9.7</td>
<td>V9.7</td>
<td>1/03/2018</td>
<td>Update 9.7 includes enhancements and bug fixes with a focus on improving O₂ bump tests.</td>
</tr>
<tr>
<td>Software v. 9.6.1</td>
<td>V9.6.1</td>
<td>06/06/2017</td>
<td>Update 9.6.1 includes better compatibility with Ventis Pro, improved troubleshooting messages, and bug fixes.</td>
</tr>
</tbody>
</table>
DSX-L Docking Station

DSX-L Software v. 9.8 – released June 29, 2018

New software is available for the DSX-L Docking Station. DSX-L v9.8 includes several enhancements and bug fixes including improvements to manifolding.

**Upgrade Recommendation**

Recommended – Industrial Scientific recommends you upgrade the docking station firmware to ensure optimal performance.

**What enhancements are in DSX-L v9.8 Software?**

**Manifolding Improvements**

[DSW-1883] Allows gas manifold assignments to continue if a cylinder is disconnected then reconnected, or if a cylinder is replaced. Manifolding was introduced with v.9.7 and allows a single gas cylinder to be shared between multiple docking stations. Up to five docking stations can participate in a single manifold.

**Additional Enhancements**

[DSW-1810] Provides support for proximity alarms in eventlog.

[DSW-1811] Allows propane calibration for the Ventis Pro LEL sensor.

[DSW-1833] iNet Now disconnection alerts can be visual only or visual and audible. This change allows that setting to be available in DSSAC.

[DSW-1715] SafeCore allows users to disable audible alarms on LENS wireless peer alarms. This change allows that setting to be available in DSSAC.

[DSW-16] Allow CLO2 sensors to be bump tested with CL2.

[DSW-1718] [DSW-1721] [DSW-1722] [DSW-1761] [DSW-1807] [DSW-1805] [DSW-1812] [DSW-1842] [DSW-1913] [DSW-1914] [DSW-1915] [DSW-1874] Enhancements for future instrument support.

[DSW-1834] [DSW-1891] [DSW-1891] [DSW-1893] [DSW-1848] [DSW-1892] [DSW-1894] Minor enhancements and bug fixes.

Relevant part numbers for DSX-L software:

- 17157655 - New Installation Kit DVD, DSX-L software
- 18109453 - Upgrade Kit DVD DSX-L software
New software is available for the DSX-L Docking Station. DSX-L v9.7 includes several enhancements and bug fixes with a focus on improving O₂ bump tests and providing clearer troubleshooting messages.

**Upgrade Recommendation**
Recommended – Industrial Scientific recommends you upgrade the docking station firmware to ensure optimal performance.

**What enhancements are in DSX-L v9.7 Software?**

**O₂ Sensor Bump Test Improvements**
[DSW-1358] We have refined the process for O₂ bump tests to further automate the process. If an O₂ sensor fails a bump test, it will now automatically be calibrated (zeroed). Upon successful completion of a calibration, the sensor will be bump tested again. This eliminates the need for manual intervention when the docking station can correct for normal sensor drift that results in a failed bump test.

**Improved Messaging**
Based on customer feedback, we have updated some DSX™ Docking Station messaging to provide clearer troubleshooting instructions.

[DSW-1616] The troubleshooting message “Unavailable Instrument” has been eliminated and replaced with the following four messages:

- **“Bump Failure (sensor symbol)”** – The docking station will now indicate which sensor failed the bump test.
- **“Calibration Failure (sensor symbols)”** – The docking station will now indicate which sensor(s) failed calibration. Note: If multiple sensors fail calibration, the issue is likely related to a cylinder connection, the docking station door, or other factors that affect gas delivery rather than with the sensors themselves.
- **“Instrument Error”** – Indicates that the instrument has an error that cannot be corrected by the docking station. Refer to the instrument display for additional details about the error.
- **“Communication Error”** – Indicates that the docking station is unable to establish communication with the instrument. Check the placement of the instrument in the docking station and the condition of the instrument battery contacts.

[DSW-1820] The troubleshooting message “Unavailable gas” has been replaced with:

- **“Cylinder Expired 1810-xxxx”** – Indicates that the referenced gas cylinder is expired and should be replaced.
- **“Replace Cylinder 1810-xxxx.”** – Indicates that the referenced gas cylinder is empty and should be replaced.

[DSW-1821] In order to accurately calibrate a CO₂ cylinder, zero air must be connected to Port 1 of a DSX-L Docking Station. If zero air is not present during a CO₂ calibration, the docking station will display the message “Connect Zero Air Cylinder.”
Improved messaging during calibration, including communication when a biased O₂ sensor is not yet ready for gas to be applied.

Additional Enhancements
[DSW-1572] Provides support for manifolding, which allows a single gas cylinder to be shared between multiple docking stations. Up to five docking stations can participate in a single manifold.


[DSW-844] Adds ability to set instrument security codes via DSSAC.

[DSW-1699] Enables download of server log while in view mode.

[DSW-1719] Allows the selection of LEL CH₄ measurement range LEL50 (0 to 5.0%) or LEL44 (0 to 4.4%) for German Ventis Pro users.

[DSW-1504] Modifies gas alert criteria to allow them to be equal to or less than the low alarm setting. This feature makes it possible to disable gas alerts for individual sensors.

[DSW-1446] Allows ability to edit the calibration past due days warning via DSSAC.

[DSW-1658], [DSW-1694], [DSW-1700], [DSW-1702], [DSW-1708], [DSW-1709], [DSW-1617], [DSW-1543], [DSW-1490], [DSW-1486], [DSW-1482], [DSW-1443], [DSW-1251], [DSW-1388], [DSW-1390], [DSW-1428], [DSW-1454], [DSW-1549], [DSW-1643], [DSW-1682], [DSW-1696], [DSW-1697], [DSW-1698], [DSW-1708], [DSW-1817] Minor enhancements and bug fixes.

Relevant part numbers for DSX-L software:
- 17157655 - New Installation Kit DVD, DSX-L software
- 18109453 - Upgrade Kit DVD DSX-L software

**DSX-L Software v. 9.6.1 – released June 6, 2017**

New software is available for the DSX-L Docking Station. DSX-L Software v9.6.1 has three design goals.

1. Keep current with Industrial Scientific product offerings
   a. Ventis™ Pro instruments
   b. LENS™ Wireless
   c. iAssign™ Technology
   d. New sensors
2. Improve the customer experience with better troubleshooting messages on the docking station display
3. Fix software defects

**What enhancements are in DSX-L v9.6.1 Software?**

**Support for Ventis Pro in the Administration Console**
[DSW-1506], [DSW-1731] Ability to configure Bluetooth settings on Ventis Pro instruments
[DSW-1625], [DSW-1732] Ability to configure iAssign settings on Ventis Pro instruments
Correlation factors for Hexane, Propane, and Toluene for Ventis Pro LEL (Pentane) and LEL (Methane) sensors to support ATEX Performance certification

**Editable Sensor Settings**

<table>
<thead>
<tr>
<th>Alarm Gas Alert</th>
<th>5</th>
<th>(% LEL)</th>
<th>LEL Correlation Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm Low</td>
<td>10</td>
<td>(% LEL)</td>
<td>Nonane</td>
</tr>
<tr>
<td>Calibration Gas</td>
<td>Pentane - C5H12</td>
<td></td>
<td>Hexane, Pentane, Propane, Toluene, Nonane</td>
</tr>
<tr>
<td>Gas Concentration</td>
<td>25</td>
<td>(% LEL)</td>
<td></td>
</tr>
</tbody>
</table>

**Support for Lead-Free Oxygen Sensor on the Docking Station**

[DSW-1675] Proper calibration schedule for new lead-free oxygen sensor

**Better Troubleshooting Messages on the Docking Station**

[DSW-1758] Instead of "System Error 0x000000000" the docking station will display "Contact ISC Error 1234"

[DSW-1406] Instead of displaying "Unavailable Gas (O₂)," the MX6 iBrid™ now reads "Unavailable Gas (Zero Air)"

**What software defects are fixed in DSX-L v9.6.1 Software?**

[DSW-1711] Technical documentation updated for Ventis™ MX4
[DSW-1724] Correct calibration interval now displayed for Ventis Pro instruments in the Administration Console
[DSW-1751], [DSW-1754] Improved robustness of DSX-L v9.5 to v9.6 upgrade scripts
[DSW-1422] For MX6 iBrid instruments, correct invalid “unavailable” state in Administration Console
[DSW-1723] No timeouts when retrieving data in the Administration Console from larger databases (those with thousands of instruments)

Relevant part numbers for DSX-L software:
- 17157655 - New Installation Kit DVD, DSX-L software
- 18109453 - Upgrade Kit DVD DSX-L software