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Setup Guide

DSX Standalone Mode DSXi Cloud-connected Mode iNet® Accounts

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Introduction

This document provides short-form instruction that will guide you through the installation of a DSX[™] Docking Station. It is not a substitute for the *Product Manual* (available at the web address noted above). Read and understand the manual for supplemental setup instruction, and important use and care information.

Based on your order type, complete the steps noted below. If you have any questions during setup, see the *Product Manual* or contact Industrial Scientific (see back cover).

Overview

Order type	Complete these steps
DSX Standalone Mode	2–18
DSXi Cloud-connected Mode (DSXi)	1A and 2–16
DSX-to-DSXi upgrade (DSXi)	1B and 2–16
iNet Account (replacement or add-on equipment)	2–16

Instruction

DSXi

Step Task 1 Activation for the order type(s): You will need your Activation Certificate

Note: Complete 1A or 1B, but not both, depending on whether you ordered a DSXi unit (1A) or a DSX-to-DSXi upgrade (1B).

- 1A If you ordered a DSXi unit, find its *Activation Certificate* in your docking station shipment.
 - To install your *first unit*, go to www.indsci.com/mydsx and proceed as directed.
 - To install additional units, log into iNet Control. Click on the "Fleet" tab and, from its drop-down menu, select "Activate a Docking Station", then proceed as directed.
- 1B If you ordered DSX- to-DSXi upgrade, you will receive an *Activation Certificate* from Industrial Scientific for each unit you are upgrading. Go to www.indsci.com/mydsx and proceed as directed.

For steps 2–16, match the instruction to the image on page 3.

2 iGas Cable Retainer Setup

The docking station comes with three adhesive-backed rubber pads and three cable ties. They are used to prevent movement of the iGas cables while they are connected to the docking station.

2 Install the adhesive-backed rubber pads into the recessed areas of the cable retainer.

3 Internet connection

DSXi units and iNet Accounts: network connection required.

Standalone Mode orders: computer connection recommended.

Supplies: Ethernet cable Cat5 or greater with RJ45 connectors. For longer cables, 14–110 m (46–360 '), use a solid conductor shielded twisted pair cable.

3 Plug the cable into your network connection (or computer for Standalone Mode orders). Connect the other end of the cable to the docking station's LAN PORT.

4-8 Start-up

- 4 Locate the universal power supply and regional power cord that ships with the DSX.
- 5 Connect the power supply to the power cord.
- 6 Connect the power supply to the docking station.
- 7 Plug the power supply (or cord) into a suitable outlet.
- 8 Check the docking station display panel. When the unit has successfully completed its start-up process, the green LED should be on and the text message should include:
 - "Standalone" for Standalone Mode orders.
 - "√ iNet" for DSXi units and iNet Accounts. If the message doesn't display within 15 minutes, the unit is not cloud-connected. DSXi users, recheck the work you did in "Activation". For iNet Accounts, contact Industrial Scientific.

9 Fresh-air fitting

9 The fresh-air fitting is installed at the factory and is connected to the *blue* intake port labeled ZERO AIR. If your application requires a zero-grade-air cylinder, remove the fitting: turn its white swivel connector counterclockwise.

10-16 iGas cylinder connections

Supplies: compatible iGas cylinders equipped with demand-flow regulators; iGas card-reader-and-tubing assemblies (assembly). Connections for calibration gas are described and shown for the port set iGAS 2-CAL GAS. If connecting a zero-grade-air cylinder, follow the instructions below, but use the port set iGAS 1-ZERO AIR.



- Port set iGAS 1- ZERO AIR
- 10 Attach the demand-flow regulator to the cylinder. Turn the cylinder clockwise to tighten.
- 11 Slide the iGas card, which is attached to the cylinder, into the assembly's card-reader.
- 12 Attach the open end of the assembly's tubing to the regulator nipple.
- 13 If the regulator is equipped with a pressure switch, plug its tab into the slot on the side of the card-reader.
- 14 Plug the assembly's cable connector (arrow faces up) into the iGAS 2 cable port.
- 15 From underneath the retaining bracket, insert the narrow tip of the cable tie through the hole to the right of the cable being secured. Feed the cable tie over the cable, then down through the hole on the left side of the cable. Guide the tip through the fastener head. Tighten cable tie and trim excess.



Attach the tubing's white swivel connector to the cable port's corresponding, vertically aligned CAL GAS intake port. Turn the connector clockwise to tighten.

Repeat steps 10-16 to connect additional calibration gas cylinders to the port sets, iGAS 3, 4, 5, or 6.



17-18	Data and settings	Supplies: The USB data storage device that was included with your
	Standalone Mode orders only	DSX Standalone Mode unit.

- 17 To automatically save bump test and calibration records (plus some instrument data) to the USB device, connect it to the docking station's USB port. (Device not shown.) It is important to do this because no records or data are ever saved to the docking station itself.
- To ensure your USB-saved data are correctly date-and-time stamped, refer to the *Product Manual (Setup* chapter). As instructed there, use the online *DSX Configurator* to set the station's date, time, and other options. *Note:* After configuration, the Ethernet cable can be disconnected from the docking station.

Specifications

Physical Specifications

Instruments supported	GasBadge® Pro, MX6 iBrid®, SafeCore® Module, Tango® TX1, Ventis® LS, or Ventis® Pro4, Ventis® Pro5, and Ventis® MX4
Dimensions	GasBadge Pro, Tango TX1 and Tango TX2: H: 22.66 cm (8.92 "); W: 18.1 cm (7.13 "); D: 30.22 cm (11.9 ")
	Ventis Pro4, Ventis Pro5, Ventis MX4
	Aspirated: H: 27.94 cm (11 "); W: 17.78 cm (7 "); D: 30.48 cm (12 ")
	Diffusion: H: 25.4 cm (10 "); W: 17.78 cm (7 "); D: 30.48 cm (12 ")
	Ventis LS: H: 24.97 cm (9.83 "); W: 18.1 cm (7.13 "); D: 30.22 cm (11.9 ")
	MX6 iBrid: H: 25.3 cm (9.96 "); W: 18.1 cm (7.13 "); D: 30.22 cm (11.9 ")
	SafeCore Module: H: 27.3 cm (10.75"); W: 18.1 cm (7.13"); D 32.12 cm (12.65")
Gas and fresh-air intake ports	3-port configuration: two gas and one fresh air
	6-port configuration: five gas and one fresh air
Pump flow rate	1.2 SCFH (550 mL/min)
Communication	10/100 Ethernet support using an Ethernet cable that comprises RJ45 connectors and is of the cable type Cat5 or greater (for longer cables, 14–110 m [46–360 '], a solid conductor shielded twisted pair cable).
	USB port for data storage device or printer (for use with Standalone Mode units only).
Display	128 x 64 dot matrix LCD
	Language options: English, French, German, Portuguese (Brazil), or Spanish
Performance Specificat	tions
Operating temperature range	0–50 °C (32–122 °F)
Operating humidity range	0–80% relative humidity (RH) up to 30 °C (86 °F), decreasing linearly to 50% RH at 50 °C (122 °F)

Supply voltage: 100-240 VAC/12 VDC

Frequency range: 50-60 Hz

Current rating: 5A

Warnings and Cautionary Statements

Failure to perform certain procedures or note certain conditions may impair the performance of this product. For maximum safety and optimal performance, please read and follow the procedures and conditions listed below.

⚠ Use only in a clean air environment known to be nonhazardous.

Use of this product in areas where it may be subject to large amounts of electromagnetic interference may affect the reliable operation of this device and should be avoided. Sources of large amounts of interference could be and are not limited to:

Operation near high radio frequency (RF) fields (near 2-way radio transmission antennas where the RF fields may greatly exceed 10 V/M, etc.).

AC Power Mains that may have excessive power surges, spikes, or transients (from large AC motors operating heavy loads, which may induce voltage sags, etc.).

- Use only at altitudes below 2,000 m (6,000 ').
- NOTE: This product has been tested to, and passes all EMC requirements to EN 61326-1:2013 Electrical Equipment for Measurement, Control and Laboratory Use for Type 2 (Industrial) Apparatus, as well as FCC Part 15, Class A emissions levels when installed to the requirements outlined within this manual. Mandatory compliance to these standards helps to ensure controlled, reliable operation of this device when exposed to typical levels of electromagnetic interference as well as ensuring that this device is not the source of emissions that might interfere with other equipment installed nearby.
- NOTE: Per 30 CFR 75.320(b), the product tests for oxygen deficiency of MSHA-approved oxygen detectors compatible with the product that can detect 19.5 % oxygen with an accuracy of ± 0.5 %.
- NOTE: Per 30 CFR 22.7(d)(2)(i), the acceptable limit during calibration and bump testing with 2.5% methane must be 10% for MSHA-approved instruments using Industrial Scientific certified calibration gas.
- NOTE: This product has an internal pump that controls the flow of gas delivered to the system. As a result of the internal pump, a demand-flow regulator must be used in conjunction with this product.
- Higher wind speeds and areas that use strong ventilation systems can dilute calibration gases during zeroing, bump testing, and calibration.

Notice: The software associated with this product contains open source components. To obtain licensing and related information about these components, <u>click here</u>.

Care and Operating Guidelines

Use the following guidelines to enhance personal safety and protection of the docking station and working environment.

The unit should be serviced by qualified personnel only. Contact Industrial Scientific for examination or repair.

To reduce the risk of electric shock or fire:

- Do not use the unit during an electrical storm without proper protection.
- Do not connect or disconnect any cables to or from the unit during an electrical storm.
- Do not expose the unit to rain or moisture.
- Do not push any objects into the openings of the unit.

To help protect the unit from sudden, transient increases or decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).

To avoid possible damage to the unit's system board, wait 5 seconds after powering off the unit before restarting.

To avoid shorting the unit when disconnecting a network cable, first unplug the cable from the unit, and then from the network jack. When connecting a network cable, first plug the cable into the network jack, and then the other end into the unit.

Be sure nothing rests on the unit's cables or tubing. Ensure cables and tubing are not located where they can be stepped on, cut, tripped over, loosened, or disconnected.

Do not place the unit on or near flammable materials.

The unit is equipped with a fixed-voltage power supply and will operate at only one voltage (see the regulatory label on the outside of the unit for its operating voltage).

Do not use corrosive chemicals or vapors near the unit.

Do not immerse the power cable or plug in water.

Do not drop the unit.

Before cleaning the unit, disconnect the power supply from the power source.

- Clean the unit with a soft cloth dampened with water.
- Do not spray water directly onto the unit.
- Do not use liquid or aerosol cleaners, which may contain flammable substances.

Compressed gas cylinders and their contents may present specific hazards to the user. Use only in a well-ventilated area. Use only in accordance with the instructions and warnings as marked on the cylinder and the appropriate Safety Data Sheet (SDS).

Contact Information

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