Title	**TX7005 GasHawk Universal Docking Station (UDS) User Manual**
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1 Introduction

The TX7005 Universal Docking Station (UDS) allows the user to interface the GasHawk unit to a PC using the free HawkEye software tool, allowing data download and configuration of the unit. In addition, the UDS allows the convenient application of 2 different test gas sources, and the charging of the GasHawk battery.

1.1 Specification

- Recommended minimum gas flow rate 0.7l/min
- Max working pressure 2.7 Bar (40Psi)
- 2 barbed gas ports for 1/8" (3.2mm) ID tube
- Power supply 90-264VAC 50/60Hz (provided)
- USB interface on type B connector
- HawkEye PC Software (Windows 7 and above only)
- Status LEDs
- SD Card for data download (for future use)
- Ethernet port (for future use)
- Ingress protection IP20
- Operating temperature 0°C to +40°C, 90% RH (non-condensing)

1.2 Warnings

- Use only power supply provided
- Do not exceed rated gas pressure
- Use only in a well-ventilated area
- Do not use with gas mixtures above 50% of their LEL, or with toxic gas mixes above a safe concentration.
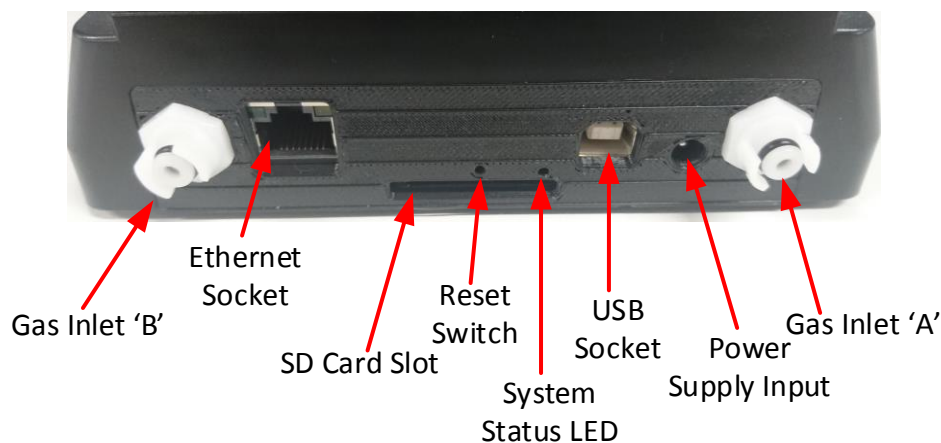- The TX7005 unit is not approved for us in explosive atmospheres

1.3 Notes

- The SD card and Ethernet functions are currently not available, these are for future expansion and should not be used at present.
- The UDS is intended for use with a constant gas flow to ensure correct test and calibration - typically this is achieved with a fixed-flow regulator. To achieve reliable results, ensure that the test gas flow is between 0.7l/min and 1.5l/min.
- It is recommended to minimise the length of tubing between the test gas bottle and the UDS, especially where 'sticky' gasses such as H2S are being used.
- The use of the UDS with Chlorine test gas is not recommended, even very short lengths of tubing, since the internal pipework of the UDS can cause significant reduction in gas concentration. For testing and calibration with Chlorine, it is recommended instead to use the test gas hood supplied with each GasHawk, with the absolute minimum possible length of PTFE tubing.

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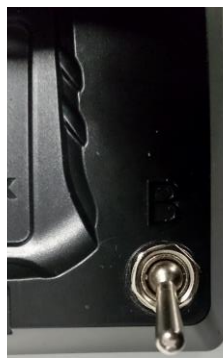
2 Installation

- Connect power supply as shown, and apply mains power.
- If required, connect USB type B cable from PC to USB port.
- Connect test gas to ports A and B as required, by pushing 1/8" (3.2mm) ID plastic tube (e.g. PVC, PTFE, FEP) onto the barbed fittings.
- If desired, the gas ports can be disconnected from the UDS by turning and un-locking. The part fitted to the gas pipe has an in-line valve to prevent gas leakage. However, it is recommended to turn off the test gas at the bottle when not in use.
- Download and install the Trolex HawkEye software from http://trolex.azurewebsites.net/hawkeye.msi

Gas Inlet 'B'

Ethernet Socket

SD Card Slot

Reset Switch

System Status LED

USB Socket

Power Supply Input

Gas Inlet 'A'

Gas Inlet Valve A

Gas Inlet Valve B

Push fit barbed connector onto 1/8" ID tube.

Lock onto UDS connector (turn until it clicks). Gas flow then activated

3   Operation

3.1   Insertion of GasHawk into UDS

1. The GasHawk can be inserted into the UDS with the stainless-steel belt clip or the docking clip fitted. However, it is necessary to remove the TX7013 protective case prior to docking in the UDS.
2. Place the GasHawk in the UDS as shown, ensuring it is pushed fully home to ensure a proper seal.
3. The UDS will automatically begin to charge the GasHawk battery; observe the LEDs on the front panel, or the GasHawk display for charging status information. The UDS can also be used to charge batteries removed from the GasHawk if desired*.

3.2   Application of test gas

1. Ensure that the GasHawk is fully inserted into the UDS and that the lid is closed with no visible gaps.
2. Set the flow regulator on the test gas bottle to between 0.7l/min and 1.5l/min.
3. Open the desired gas port, while leaving the other closed, by moving the switch towards the top of the unit.
4. When changing gas bottles or changing between channels A and B, allow the new test gas to purge for at least 5 seconds before commencing testing.

Note that, if the battery is being charged in a GasHawk when switched on, the GasHawk's display gives a more accurate indication of charging status than the Green LED on the UDS.

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3.3   Connection of GasHawk to PC

Ensure that the UDS is powered on (blue LED lit), no SD card is inserted, and that the USB cable is connected to the PC. Open the HawkEye software and follow the built-in help system, ensuring that you first select the correct serial port which corresponds to the UDS.

3.4   Resetting the UDS

To reset the UDS internal processor, insert a fine pin such as a paperclip into the recessed reset button as shown, and hold for 2 seconds. The rear status LED should change from blue to green. A red rear status LED indicates a fault condition, consult Trolex for assistance.

3.5   Status LEDs

3.5.1   Front LEDs:

The front LEDs relate only to the status of the battery charger, and are identical in function to those on the standard charging station.

Left LED (Green)
Off – not charging
Flashing green – battery charging
Solid green – battery charged

Middle LED (Red)
Off – status ok
Flashing red – power supply fault
Solid red – battery pack fault (e.g. over-temperature)

Right LED (Blue)
Off – DC power off
Solid blue – DC power on

3.5.2   Rear LED

The rear multi-colour system status LED relates to the function of the UDS itself:
Off – system off or booting
Solid Blue – No SD card inserted – system in 'relay' mode to HawkEye
Solid Green – SD card inserted, safe to eject
Flashing Green – writing to SD card – do not eject
Flashing Red – SD card fault (e.g. formatting error)

System
Status LED

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4   Care and maintenance

Clean the UDS only with mild detergent and a damp cloth. Avoid allow water to ingress into any connectors or other parts.

Avoid installation of the UDS in areas subject to excessively high temperatures or humidity.

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