



**OPERATION & MAINTENANCE  
MANUAL**

**for the**

**Mixed Gas Panel  
Two Diver plus Standby**

**(Part No: PP036)**

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# DIVEX LTD

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## **Introduction**

This Divex panel permits up to two air/mixed gas divers to be backed up by a standby diver on a totally separate gas supply and distribution circuit. The high flow HP regulator will supply adequate gas flows at the maximum operating depth of the panel. Depth monitoring is via three 0.25% accuracy, mirror scale gauges. Relief valve, control valves and pipework have all been selected for high flow, mixed gas and environmental capability. An emergency cross-over facility allows standby supply and main divers supplies to be connected in the event of HP regulator failure or need to switch to an alternative gas supply.

# **Safety Notice**

**Mixed Gas Diving Operations are extremely hazardous and should only be undertaken by experienced, appropriately trained personnel.**

**This manual describes the features of this panel only. It is not intended as an Operator Training or Dive Procedure manual.**

**The maximum diver working depth using gas supplied from this panel is 100 msw.**

**It is the user's responsibility to ensure that this equipment is suitable for the intended diving operation and that all Local Regulations are followed.**

## **1. Panel Description**

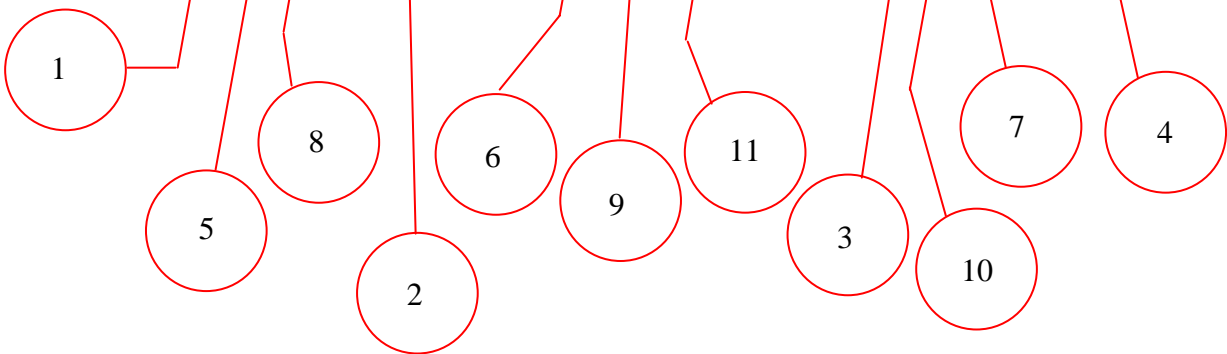
The Air / Mixed Gas 2 Diver + Standby panel is designed to supply air / mixed gas to two working divers and a standby diver. The panel comprises two similar but separate, self contained systems with the option of crossing over between the systems in the event of gas shortage or malfunction in one of the systems. An auxiliary LP inlet allows LP air to be supplied to any or all of the divers in the event of total HP gas loss or regulator malfunction.

The system intended for the two the working divers consists of 1 HP air inlet (No. 6 JIC), 1 HP mixed gas inlet (No. 6 JIC), 1 high flow HP / LP regulator, 2 HP (inlet pressure) gauges, 1 LP (diver supply pressure) gauge, 2 Pneumo gauges, 2 Pneumo umbilical connections (No. 4 JIC) and 2 independently valved breathing gas umbilical connections (No. 6 JIC).

Downstream of the HP / LP regulator each working divers' gas supply is independent of the other.

The standby system is similar except there is only one Pneumo gauge, Pneumo umbilical connection and breathing gas umbilical connection.

## 2. Installation





1. HP mixed gas inlet (standby diver)
2. HP air inlet (standby diver)
3. HP mixed gas inlet (working divers)
4. HP air inlet (working divers)
5. Pneumo umbilical connection (standby diver)
6. Pneumo umbilical connection (diver 2)
7. Pneumo umbilical connection (diver 1)
8. Breathing gas umbilical connection (standby diver)
9. Breathing gas umbilical connection (diver 2)
10. Breathing gas umbilical connection (diver 1)
11. Auxiliary LP air inlet.
12. Pneumo gauge
13. HP inlet pressure gauge
14. LP breathing gas pressure gauge
15. Regulator
16. Divers' gas valve
17. Crossover valve
18. Regulator isolation valve
19. HP mixed gas inlet valve
20. HP air inlet valve
21. Pneumo blowdown valve

1. Connect appropriate gas supplies to the HP inlets and the auxiliary LP inlet (if used).
2. Fit the divers' breathing hoses and pneumo hoses to the appropriate connections.
3. Close all valves on the panel and back off the regulators (15).
4. Turn on the gas supplies to the panel.
5. On each side of the panel (divers & standby) turn on the air supply valve (20), turn on the isolation valve directly after the regulator (18) and use the regulator (15) to select a pressure on the LP gauge (14) which is at or above the working pressure.
6. Observe the LP gauge (14) – a falling reading could indicate a leak.
7. Repeat steps 5 and 6 but open the mixed gas supply valve (19) instead of the air supply valve.
8. Check operation of the crossover (17) and auxiliary LP valves.

**It is the responsibility of the user to ensure the panel provides adequate pressure and flow for the equipment used and the intended diving operation.**

**All gauges must be calibrated in accordance with local regulations.**