Shadow Back Mount



Shadow Back Mount is a variant of JFD's highly successful Shadow Life Support System that has been designed to meet the evolv- ing operational roles of the Tactical Diver.

Optimised for both free-swimming and Tactical Diving Vehicle (TDV) operations, Shadow Back Mount provides access to front worn mission equipment and / or full access and visibility of TDV control and display systems.

Shadow Back Mount may be worn as a stand alone Tactical Diving Life Support System or interfaced with a range of ballistic protection / equipment vest systems. This unique design offers Tactical Divers unparalleled performance and mission flexibility whilst minimising size and weight.

PRINCIPLES OF OPERATION

Shadow Back Mount is a pure oxygen rebreather with over the shoulder counter lungs and a back mounted ${\rm CO_2}$ absorbent canister.

Oxygen is supplied from the pressure vessel (cylinder) to a demand valve that automatically adds oxygen to the re-circulation sub-system. One-way check valves in the breathing hose mouthpiece assembly ensures exhaled breathing gas is re-circulated through a long endurance scrubber canister that removes exhaled ${\rm CO}_2$ prior to re-inhalation.

A readily accessible submersible pressure gauge enables continual monitoring of oxygen pressure vessel.



OPERATIONAL VERSATILITY

Shadow Back Mount is suitable for a range of mission profiles including:

- Over the beach operations
- Two person ride on Tactical Diving vehicles
- Multiple person ride in Tactical Diving vehicles

IMPROVED SAFETY

A common life support system family platform (Shadow / Shadow Back Mount / Excursion / Enforcer) enhances diver safety as a result of familiarity with common assembly and maintenance procedures together with standard and emergency operating procedures.

SPECIFICATION	
Height	600mm
Width	400mm
Depth	400mm
Weight	9kg

PERFORMANCE	
Maximum depth (m)	15*
Canister duration (h)	4 - 6**
Air temperature operation	-20°C to +40°C
Sea temperature operation	-2°C to +35°C
Fresh water temperature operation	+1°C to +35°C
Pressure	300 bar cylinders

- * Dependent upon local oxygen exposure limitations
- ** Dependent upon diver work-rate and water temperature

LOGISTIC ADVANTAGES

The unique multi mission capability of Shadow offers reduced through-life costs and logistical advantages that include:

- Dual role front/back mount configuration with changeover conversion kit
- A common platform reduces costs associated with training divers to use multiple UBA
- Common spares reduces the spares inventory
- Common documentation/manuals
- Reduced maintenance
- Fully user serviceable