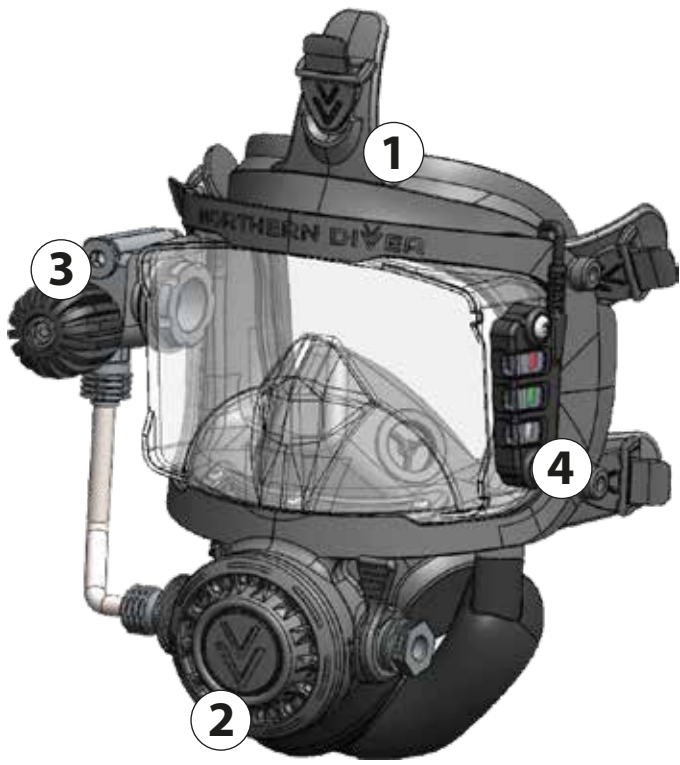


NORTHERN DIVER

MINE WARFARE & MILITARY DIVING SPECIALISTS



**Divers Integrated Full Face
Mask Breathing System**



Northern Diver have designed and developed a complete integrated breathing system that offers a safe and reliable full face mask.

The complete system includes a Full Face Mask with integrated Regulator, Side Block and Low Pressure Air Warning System that is compatible with existing Diver Communications.

- Reduces risk
- Improves safety
- Improves reliability
- Interoperable with existing equipment

1. Full face mask
2. Integrated regulator
3. Switch block
4. Low Air Warning System (LAWS)



Full Face Mask with Integrated Regulator

The Northern Diver Full Face Mask, Odyssey, was designed and developed to be the most low profile diving mask available on the market, reducing snag hazards, components and weight. Due to the central location of the 2nd Stage regulator the mask is extremely well balanced and comfortable ensuring minimal drag on the divers head when turning. Designed and developed to meet the requirements of EN250.



Diver Communications can be integrated and used in conjunction with the system. The 2nd Stage regulator testing has been conducted via independent laboratory using certified ANSTI Breathing Machines.

Technical:

- Designed for all water environments
- Venturi Lever for dive and pre-dive settings
- A single side exhaust directs bubbles away from the visor
- Large area double skirt seal to fit all face sizes
- Low volume oral nasal cavity with non-return valves to promote air circulation and reduce CO2 build up
- Customisable nose block to aid in equalisation
- Available with Integrated side block allowing easy opening of a secondary air supply
- Port for easy installation of communications equipment
- Type of second stage: pneumatically balanced
- Exhaust: single side system with air overflow technology
- Heat exchanger for freezing resistance: twin heat system
- Hose type: two braided flexi hose
- Work of Breathing Performance: avg. 1 joule/litre @50M 4° water BPM 62.5l/m
- Weight with Side Block: 1.4kg (3.1lbs)
- Weight without Side Block: 1.0kg (2.2lbs)
- Storage Temperatures: -10°C (14°F) and +50°C





Side Block

Designing a concept around proven technology that is used commercially worldwide, we have incorporated a resilient switch block onto the face area of the mask, which is positioned in an easily accessible location so the diver can open the switch block valve single handed in nil visibility conditions.

The weight of the switch block is less than half the weight of existing competitor models and is machined from a solid billet removing all potential leak paths caused by tapered threads and PTFE tape joints

Manufactured to the highest standards and CE approved to conform to the requirements EN250:2014.

Features:

- Depth rating: 0-50 metres
- Breathable air: For use with compressed breathable air complying with EN 12021 only, complies with EN 12021
- Cold Water Performance : <10°C
- Storage: -30°C to +70°C
- Dimensions (LxWxD): 68.5*60*44.5mm
- Weight: 230g

Material:

- Housing: Brass CZ121
- Finish: Chrome Plated
- Spring 316 S/S
- O-Rings NBR
- Acetal

Flow:

- Main via 1st stage: >150m³/hr @ 10bar outlet / 50 bar inlet.
- Bail via 1st stage: >150m³/hr @ 10bar outlet / 50 bar inlet.



Head Mount Receiver
(73*35*12mm)

LAWS

Low Air Warning System:

The LAWS system has been designed as an additional safety feature to alert the diver and dive buddy of the air status. The pressure sensors are fitted to the main and bail out cylinders, and the light rail mounts on the side of the full-face mask. It is a completely wireless system, preventing snag hazards.

Head mount receiver:

Connected to the side of the FFM where all lights are visible to both the diver and dive buddy and sits in the divers' peripheral view. It does not affect field of vision.

Signals:

Green Light:

Low light (good to go with 1 hour plus battery life) when the green light flashes, this indicates low battery (less than 1 hour).

Red Light:

Main / Flashing indicates the air is at 50bar, alerting the diver to switch to the bail out cylinder and begin ascent.

White Light:

Indicates that the diver has switched to bail out cylinder and breathing from the reserve.

Various bracket mounts available to enable use of the LAWS on other brands of Full Face Masks. A magnetic charging cable allowing charging while in situ (Lithium Iron re-chargeable cell with a run time of 4-5 days on full)

Pressure Sensors:

Bluetooth sensors, manufactured to comply with all relevant standards, made from the highest quality materials to ensure reliability and robust in all environmental conditions. Screw thread connection 7/16x20UNF to fit all H.P. first stage regulators. Transmitter is powered by a user-replaceable 3v lithium CR123A battery. Replacement battery kits also contain a new O-ring and cover, which must be changed at the same time. Battery life is around 1 year (at 100 dives per year).



Pressure Sensor (2 supplied)
(85*40mm)



Magnetic charging cable

NORTHERN DIVER

MINE WARFARE & MILITARY DIVING SPECIALISTS

HEAD OFFICE

Northern Diver International Ltd
East Quarry, Appley Bridge, Wigan
Lancs, WN6 9AE, UK

MEL SIMM

Office: +44 (0) 1257 25 69 36
Mobile: +44(0) 7877 693 876
Email: mel@ndiver.com

NEIL TORDOFF

Office: +44 (0) 1257 25 69 49
Mobile: +44(0)7872 061 533
Email: neil@ndiver.com

VISIT

www.ndiver-military.com