



# IQ Pack Harness User's Guide

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# **Buoyancy Compensator** **User's Guide**

**Thank you for choosing OMS,**

OMS buoyancy compensators have been constructed from rugged materials with unique features adaptable to advanced underwater environments. The general design philosophy allows for complete system integration of a number of components achieving high lift capacities, low drag, and increased safety through redundancy. With a selection of different harnesses, different air cells and accessories, a diver can configure his or her system for the specific environment they are operating in. This equipment is intended for use by individuals with the training and experience to dive these environments safely

## **General Precautions & Warnings**

- Before using this buoyancy compensator (BC), you must receive instruction and certification in SCUBA diving and buoyancy control from a recognized training agency. Use of SCUBA equipment by uncertified or untrained persons is dangerous and can result in injury or death.
- Read this owner's manual completely before attempting to use your BC, and become familiar with it first in a controlled environment such as a swimming pool, in order to weight yourself properly and to become comfortable with using its many features and adjustments.
- Before every dive, perform a complete pre-dive inspection according to the procedure prescribed in this manual, to ensure that all components are functioning properly and no signs of damage or leaks are present. If you find that your BC is not functioning properly or is damaged, remove it from service until it can be repaired.
- Your BC is not a lift bag. Do not use it to bring heavy objects to the surface. Doing so may cause permanent damage to the BC, and could also result in serious injury or death due to embolism or decompression sickness.
- In an emergency such as an out of air situation or uncontrolled descent, it is important to remove and jettison weight immediately. Do not depend solely on using your BC's power inflator to lift you to the surface.
- In the event of an uncontrolled, rapid ascent, it is important to immediately begin venting air from the BC. Continue venting air to slow your ascent rate if neutral buoyancy cannot be reestablished.

- Do not inhale from your oral inflator. The BC may contain harmful contaminants or gasses, which could cause suffocation or injury.
- The function of your buoyancy compensator is to help you maintain neutral buoyancy while in a comfortably balanced, face-down swimming position underwater. It is also designed to provide you with flotation so that you can rest on the surface, but it is not designed to function as a life preserver or personal flotation device (PFD). A buoyancy compensator (BC) is not a life jacket. It is not designed to provide face-up flotation in all situations, and therefore it does not meet U.S. Coast Guard regulations for a life preserver or personal flotation device (PFD).
- Have your OMS equipment inspected and serviced annually by an authorized OMS dealer or at any time you have any concerns about your equipment's function or condition.



## The IQ Pack Harness System

The OMS IQ Pack is a versatile fast adjusting harness system that can be used with or without a back plate. This means that it can be used as a lightweight travel BC or a heavy duty technical diving jacket capable of carrying double cylinders.



The OMS IQ Pack comes fully assembled but there are a number of adjustments and features the diver should be familiar with.



There is a row of small D-rings along the side of the harness for attaching accessories. There also larger D-rings mounted on the waist strap that can be repositioned or removed completely.

Make all adjustments while wearing your exposure suit. Trim excess but allow length for future changes and the addition of more D-rings. If you have any questions, please contact OMS and speak with a technical support representative.

# Assembly of the IQ Pack Harness System

## Attaching the Bladder and Single Tank

A bladder can be attached to the IQ Pack with two nylon tank bands. Locate the sewn webbing slots sewn onto the back of the IQ Pack. Thread a nylon tank band through the top slot and another through the bottom slot. Next, thread the free ends of the tank bands through the corresponding slots in the bladder. As the tank bands are tightened onto the tank the bladder and harness will be securely sandwiched together against the tank.



## Optional Bookscrews

If the BC is to be used primarily as a 'soft pack' (no back plate), the diver should consider purchasing a set of OMS 'bookscrews'. Installation of the book screws will allow the BC to be handled as a single component even when not attached to a tank. To install the bookscrews, grasp the top of the IQ pack's back pad and peel it downward revealing the grommet holes. Insert the slot head screw through the grommet hole of the harness then through the matching grommet hole of the bladder. Insert the narrow end of the female nut through the grommet hole of the bladder from the back. Mate the threads of the male and female parts then tighten them to secure the bladder against the harness.



# Assembly of the IQ Pack Harness System

## **Attaching the Single Tank Adaptor**

The OMS single tank adaptor may be used to secure a single tank to an IQ Pack that has a back plate installed. To install a back plate, grasp the top of the IQ Pack's back pad and peel it completely downward revealing an opening at the bottom of the harness. Slide a back plate up into the slot aligning the grommet holes with the bolt holes in the back plate. Insert the bolt studs of the Single Tank Adaptor through the grommet holes in the back of the bladder through the boltholes of the back plate and through the corresponding holes in the harness. Hold the adaptor, bladder and harness together and place the large washer over the bolt stud then the split lock washer followed by the wing nut. Tighten the wing nut securely then press the back pad back into place against the Velcro strips.





# Operations

## Pre-Dive Checks

- Check all fittings and connections for damaged components (cracks, tears, etc.)
- Inflate each bladder until the dump valve vents, leave inflated for 30 minutes.
- On dual bladder models test each bladder separately (do not inflate both bladders at the same time)
- With the bladder fully inflated check that pull dump cord or folds in the bladder are not trapped by the retraction bands
- Check the security of weight systems before entering the water.
- After entry, inspect units for bubbles indicating leaks.
- Test pull dumps for smooth operation and positive seal.

## Operations

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- Inflate the bladder with short controlled bursts of air by pressing the inflate button.
- The unit can be inflated orally through the oral inflator. Depress the deflate button completely and exhale into the oral inflator.
- On dual bladder models, the bladder against the diver's back is the primary bladder. Do not inflate both bladders at the same time. This could decrease the overall lift provided by the jacket.
- Deflate the jacket by pressing the deflate button on the inflator or by pulling a pull dump. Use proper descent techniques taught in scuba training.

**WARNING! Repeated improper use of the Oral Inflation/ Deflation mechanism or dump valves assemblies may allow water to enter the BC with a subsequent reduction in buoyancy. Reduced buoyancy can cause a loss of buoyancy control resulting in PERSONAL INJURY OR DEATH**

## Post-Dive Checks

- Connect the inflator to an air supply to pressurize the inflator mechanism then use a garden hose to direct fresh water into the oral inflator while pressing the deflate button.
- Partially inflate the unit and allow the water to wash around the interior of the bladder. Drain completely and store partially inflated away from temperature extremes and direct sunlight.
- Do not attempt to service a malfunctioning piece of equipment. Take it to an authorized OMS dealer for repair.



# WARRANTY

## WARRANTY AND LIMITATION OF LIABILITY

1. OMS® warrants to the purchaser that goods sold by OMS® to the purchaser will be free from manufacturing defects in materials and workmanship for a period of ninety (90) days after the date of purchase from an authorized OMS® dealer.
2. EXCEPT AS EXPRESSLY SET FORTH IN SECTION 1 'WARRANTY AND LIMITATION OF LIABILITY', COMPANY MAKES NO WARRANTIES TO THE PURCHASER, WRITTEN OR ORAL, EXPRESS, IMPLIED OR STATUTORY, IN ANY MANNER OR FORM WHATSOEVER INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED.
3. The warranty does not apply to goods that have been subject to abuse, misuse, neglect, improper installation or alteration after delivery to the carrier for shipment to the purchaser. At OMS'® request, the purchaser shall return goods to OMS® at its Middletown, NY, office for verification that the warranty set forth in these terms and conditions as limited by this paragraph is applicable. Any such returns are subject to the provisions in the RETURN POLICY Section.
4. In the event OMS® determines that the warranty set forth above in #1 of this Section are limited by #3 in this Section is applicable to any goods, OMS® shall, as the purchaser's sole remedy, replace, repair or at OMS'® sole discretion, issue to the purchaser a credit for an amount not to exceed the original purchase price paid by the purchaser for the affected goods. OMS® shall have no liability with respect to warranty claims made by the purchaser more than ninety (90) days after OMS'® sale of the goods involved to the purchaser. In no event shall OMS® be liable to the purchaser for a special, incidental or consequential damages. OMS® shall have no liability to the purchaser for any delay or failure in carrying out its obligation to the purchaser for reasons beyond OMS'® control, including without limitation, acts of God, war, natural disasters, labor disputes, changes in or compliance with laws, regulations or governmental policies and shortages of supplies and services. OMS® may extend delivery until any such cause of delay has been removed, or at its option, cancel the undelivered portion of any order so affected without liability to the purchaser; except for the return of any payment made by the purchaser to OMS® with respect to any undelivered portion of the order so canceled.