

USER MANUAL

BUOYANCE CONTROL DEVICE

1. INTRODUCTION

Congratulations on purchasing a HOTDIVE Buoyancy Control Device (BCD). Every HOTDIVE BCD is the result of our engineers' years of experience combined with real-world engineering applications, fully considering our customers' overall needs for ease of use, durability, safety and expandability. Please read this manual thoroughly before use to ensure a great diving experience.

WARNING

Before using this product, you must read and understand this entire manual. Keep this manual for future reference. Like all diving equipment, HOTDIVE products are designed to be used only by trained, qualified divers. Failure to fully understand the risks of using this equipment may result in serious injury or death. Do not use this equipment, or any other scuba equipment, until you are a trained, qualified scuba diver. You must be a certified diver holding a valid certificate from an internationally recognized training agency to use this product. In all diving activities, always follow all rules and the guidelines taught by your training agency. Carefully follow these and all other instructions for HOTDIVE products; failure to do so may result in serious injury or death. If any instruction in this manual is unclear or hard to understand, contact your authorized HOTDIVE dealer before using this product.

ATTENTION

The Buoyancy Control Device (BCD) described in this manual is not a life jacket or a life-saving device. It cannot guarantee keeping an unconscious diver with the airway out of the water. The BCD described in this manual is not a breathing system. Never inhale the gas inside the BCD bladder; doing so may result in serious injury or death. The BCD described in this manual must not be used as a lift bag to bring objects to the surface; using the BCD as a lift bag may result in serious injury or death.

2. PRODUCT CERTIFICATION

All products described in this manual have passed the relevant EU testing and comply with the international CE certifications EN 250:2014 / EN 14225-2:2017.



3. PRODUCT IMAGES



(Dreem Pro)



(Dreem)

4. ASSEMBLY AND SETUP

4.1 BCD Inflator Hose

Every BCD described in this manual is equipped with a low-pressure inflator hose. The other end of this hose must be connected to a low-pressure port on the regulator first stage. The first stage has high-pressure and low-pressure ports for connecting various components. The high-pressure ports, used to connect a high-pressure hose or a tank-pressure transmitter, have a 7/16" UNF standard thread. The low-pressure ports, used to install an alternate air source (backup second stage) and inflation systems (BCD inflator hose and drysuit hose), have a 3/8" UNF standard thread. Connect the BCD inflator hose to one of these low-pressure ports. Use a 4 mm hex (Allen) key to remove the low-pressure port plug on the first stage, then thread in the hose by hand and tighten it with a 14 mm wrench.

ATTENTION

Use only the low-pressure inflator hose supplied with the BCD. Inflator hoses from other manufacturers may not work properly with the inflator/deflator valve used on the BCD described in this manual.



4.2 Connecting to the Cylinder

The BCD described in this manual is designed to carry a standard scuba cylinder with a maximum capacity of 12 L. See the illustrations for the connection method.



(Backplate: cylinder strap detail)

(Diagram: connecting to the cylinder)



5. INSTRUCTIONS

5.1 Bladder

Function: By inflating and deflating the bladder, you adjust the diver's buoyancy underwater and help the diver establish positive buoyancy at the surface for a safe, comfortable dive.

The bladder forms an integral part of the whole BCD. It has a corrugated hose connected to a K-valve, which can be connected to the regulator first stage via a quick connector and a medium-pressure hose. The K-valve has two buttons, inflate and deflate. Pressing the different buttons uses the air in the cylinder to inflate or deflate the bladder. You can also inflate orally: while holding down the deflate button on the K-valve, blow into the inflator's mouthpiece. When inflating orally, release the deflate button immediately after you stop exhaling to prevent gas from escaping through the mouthpiece. The bladder has three quick-dump valves at different positions. These provide over-pressure protection: when the bladder is over-inflated, they release pressure automatically. They also allow manual quick dumping: when the diver is positively buoyant and needs to release excess gas from the bladder, pulling the quick-dump valve's cord allows rapid deflation.

ATTENTION

When deflating the BCD, whether using the K-valve or a quick-dump valve, the valve must be at the highest point of your body for proper venting. We therefore strongly recommend that, before diving, you become familiar with the position of every valve on the BCD. The maximum outflow of every exhaust valve is greater than the maximum inflow of the inflation valve, so in the unlikely event that the inflate button sticks, you can prevent an uncontrolled ascent by pulling the cord of the right-shoulder exhaust valve. The bladder of the BCD described in this manual is designed to be used only with air or nitrox containing no more than 40% oxygen. Using air and/or gas with a higher oxygen content may cause loss of buoyancy and valve damage due to corrosion, oxidation, premature aging or failure of components. High-oxygen gas also poses a fire or explosion hazard.



(Corrugated hose connected to the K-valve)



Four relief valves are fitted: two on the shoulders, one at the lower right and one at the elbow, all with quick-exhaust capability.



(Quick-dump valve)



HOTDIVE

5.2 Harness System

Function: The harness system consists of shoulder straps, a waist belt and the matching shoulder buckles, chest strap, waist buckle and hook-and-loop fasteners. It distributes the weight of the equipment evenly onto the diver without excessive effort, lets you put on and take off the entire BCD quickly, and adjusts to a tightness that suits your body. The shoulder straps have size markings; choose the right size for your height and weight. Before putting it on, undo the waist buckle, open the waist hook-and-loop fastener, adjust the shoulder straps to maximum length and undo the chest strap. After putting it on, tighten the shoulder straps to a suitable position, fasten the waist hook-and-loop, buckle and tighten the waist belt to a suitable position, fasten the chest strap, and route and stow the regulator hoses appropriately. (The above sequence is for reference only; follow the procedure taught in the dive course of the training system you study.) HOTDIVE BCDs generally use a proprietary Double-clock system, with the shoulder quick-release buckles arranged as a dual-buckle system, so a single BCD fits a wider range of heights and weights. According to your build, insert the shoulder quick-release buckles in the appropriate positions. Remember: the left and right shoulder straps must be inserted into buckles at symmetrical positions, otherwise the two sides may be loaded unevenly.

ATTENTION

Before wearing the BCD, be sure to choose the size that fits you according to the size chart we provide.



(X-Plore)



(Endura Flex)

5.3 Storage System

Function: The storage system consists of stainless-steel D-rings and pockets on both sides. It stows and organizes regulator hoses and components (such as the backup second stage and gauges) and stores various dive accessories.

ATTENTION

Never store sharp objects in the pockets or on the D-rings (such as a pointed dive knife without a sheath, a long poker/tickle stick, etc.); doing so may damage the BCD, injure you, or even endanger your life. When using the storage system, especially the D-rings, you must manage hoses and organize items properly, avoiding hoses or items trailing outside your body; otherwise they may snag or entangle during the dive, compromising dive safety and, in severe cases, causing a diving accident that endangers life.



(X-Plore)



Storage System

(Endura Flex)

5.4 Weight System

Function: Weight blocks are usually threaded onto a weight belt around the waist. The Pro upgraded BCD adds a user-friendly trim-weight pocket system as an aid; in addition, it is fitted with an integrated quick-release weight system. These systems are very practical: they make donning and doffing easier and diving more comfortable. (Not available on the basic Dream model.)

The trim-weight pocket system is located on the back of the BCD, close to both sides of the cylinder. Each pocket holds up to 2 kg of weight.

The integrated quick-release weight system is located at the left and right of the waist. To use it, open the hook-and-loop fastener of the quick-release weight pocket, place the required amount of lead inside, then insert the pocket into the quick-release housing and fasten the buckle. To ditch the weights quickly, release the buckle and pull the pocket's nylon handle horizontally to remove the weights rapidly and discard them. Each pocket holds up to 4 kg of weight.

ATTENTION

Do not exceed the weight limit in the pockets, or you may damage the weight pockets. At a depth of 5 m / 15 ft, with a nearly empty cylinder and the BCD fully deflated, the amount of weight needed to reach neutral buoyancy is the maximum weight load your BCD should carry; do not load more than this. If you need help determining the correct weight to reach this condition, consult your dive instructor or dive shop. Incorrect weighting may cause insufficient lift during the dive, leading to serious injury or death. Make sure your weighting is appropriate. Being over-weighted means your BCD or drysuit needs more gas to control buoyancy during the dive, and that extra gas causes more inflation/deflation buoyancy-compensation problems as depth changes during ascent and descent. Too much weight may also make it hard to keep your head above water while upright at the surface. Too little weight may prevent you from descending and/or making a safe stop in a controlled manner. Before diving, test your appropriate weight configuration while wearing your complete set of equipment, first in a pool / shallow water or a safe, controlled environment. The lead in the trim-weight pockets cannot be ditched in an emergency. Use the trim-weight pockets only when, after the weights in the quick-release pockets or on the weight belt have been released in an emergency, the diver still has enough lift to maintain a safe ascent.



Trim-weight pocket system



Integrated quick-release weight system

(Dream Pro)

6. RISK ASSESSMENT

Cold-water, low-visibility and highly strenuous dives all increase the risk of an accident while diving. If you plan to dive in cold water or low visibility, or to perform strenuous tasks, make sure you have received specialized training for these diving environments from an internationally recognized training agency; failure to do so may result in serious injury or death. In addition to the guidelines of your ice-diving specialty course, for dives in temperatures below 10°C / 50°F we recommend the following BCD use: descend slowly during the initial descent, and inflate the BCD or drysuit only in short bursts. Prolonged continuous inflation may cause the regulator to freeze and malfunction.

7. CHECK

- 7.1 Slip the cylinder band on the back of the BCD over the cylinder and position it at the neck of the cylinder, with the cylinder valve outlet facing the BCD. Tighten the band as much as possible, then fasten the BCD band buckle. Lift the whole assembly by the BCD backplate handle and shake the BCD to check that it is firmly attached to the cylinder. Then place the locating strap over the cylinder valve and adjust it until taut.
- 7.2 Now mount the regulator set on the cylinder and connect the low-pressure inflator hose to the BCD inflator/deflator valve. Secure the hose with the clip on the corrugated hose and fasten the left-shoulder hook-and-loop fastener over the corrugated hose and the low-pressure hose.
- 7.3 Visually inspect the low-pressure hose and corrugated hose for signs of wear or damage. Do not dive if a hose is damaged or worn. If the low-pressure hose is loose, it must be tightened with a wrench before diving. Slowly open the cylinder valve while facing the pressure gauge away from you, and make sure the regulator first stage and second stage do not leak. If any component in the system leaks, do not dive.
- 7.4 Read the cylinder pressure from the gauge or wireless transmitter to ensure the cylinder has enough reserve for the planned dive. Do not attempt to dive unless you have an adequate supply of breathing gas. Fully inflate the BCD and leave it for 5 minutes. After 5 minutes the BCD should still be fully inflated, the regulator should not leak, and the gauge should read the same value as before. If the BCD leaks, do not dive.
- 7.5 Inflate the BCD using the K-valve until it is over-pressurized and the relief valve operates. Check that the K-valve deflate button and the three manual relief valves work properly and that pulling them releases pressure. If there is any exhaust fault, do not dive.

8. MAINTENANCE

To reduce and remove water or contaminants in the BCD's hoses, after every dive you should rinse the regulator components in fresh water and dry them thoroughly, connect the regulator first stage to a cylinder, and ? after connecting the BCD low-pressure hose ? repeatedly inflate and deflate the BCD to dry the bladder. After this, disconnect the hose from the inflator/deflator valve and rinse the BCD thoroughly with fresh water after every dive. Pour clean fresh water into the BCD bladder through the inlet of the inflator/deflator valve, shake the BCD up, down, left and right, then drain the water through the inflator/deflator valve or the bladder's exhaust valve. This may be repeated several times until the drained water is diluted to clean fresh water, to remove salt and debris from inside the bladder. To ensure the best performance of the BCD, HOTDIVE recommends an inspection every year or every 100 dives, and a complete overhaul every two years or every 200 dives. Any type of BCD maintenance must be performed by a qualified technician certified by HOTDIVE. Regardless of usage, all hoses on the BCD should be replaced every 5 years to ensure the BCD remains in good working condition.

9. STORAGE AND TRANSPORTATION

After cleaning, inflate the BCD bladder and store it in a cool, dry place away from direct sunlight, until it is completely dry. Never expose the BCD to any heat source, and never let the hoses be crushed. When traveling with the equipment, it is best to use a padded bag, such as the bags commonly used for transporting dive equipment.

10. WARRANTY

The main body of this BCD ? the inner and outer bladders ? is warranted for three years. Other components and wear parts are warranted for three months. This BCD's warranty does not cover effects or damage caused by normal wear or end-of-life of the hose assembly or any other component of the BCD. The warranty terms and conditions are stated on the warranty certificate enclosed with the product packaging.

BCD SIZE CHART

SIZE	BUOYANCY	WAIST	HEIGHT	WEIGHT
3XS	7.3kgf.(=16.0lbf,=70N)	23-35(inch)	110-145cm	30-36kg
XXS	7.3kgf.(=16.0lbf,=70N)	24-36(inch)	145-155cm	36-48kg
XS	9.3kgf.(=20.5lbf,=90N)	25-37(inch)	152-166cm	45-56kg
S	10.3kgf.(=22.4lbf,=100N)	29-39(inch)	157-170cm	54-70kg
M	15.3kgf.(=33.6lbf,=150N)	33-40(inch)	168-178cm	68-77kg
L	16.3kgf.(=35.8lbf,=160N)	37-44(inch)	179-185cm	77-95kg
XL	18.4kgf.(=40.5lbf,=180N)	41-48(inch)	185-199cm	95-120kg
XXL	18.4kgf.(=40.5lbf,=180N)	44-53(inch)	185-199cm	95-120kg
XXXL	18.4kgf.(=40.5lbf,=180N)	48-57(inch)	185-199cm	95-120kg

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