



**SCUBAPRO**



**HYDROS PRO**

BUOYANCY COMPENSATOR

**USER GUIDE**

ENGLISH

## Congratulations on purchasing your SCUBAPRO HYDROS PRO Buoyancy Compensator!

We are confident that you will enjoy an extraordinary performance from your BC, designed and manufactured using the most advanced technology.

We thank you for choosing SCUBAPRO and wish you a future of safe dives and underwater enjoyment!



reddot award 2016  
winner



## HYDROS PRO USER GUIDE

### IMPORTANT INFORMATION:

- 5 Important Warnings
- 6 European Certification
- 7 General Information
- 9 Important Cautions
- 10 Warranty

### ALL ABOUT HYDROS PRO:

- 13 Design & Features
- 18 Specifications

### GETTING STARTED:

- 21 Initial Set-Up
- 28 Utility & Customisation
- 31 Smart Pack System

### OPERATION - KIT UP & GO:

- 34 Attach Single Cylinder
- 36 Attach Twin Cylinders
- 37 Valve System
- 46 Weight System
- 51 Pre-Dive Adjustment

### CARE & MAINTENANCE:

- 55 General Care
- 56 BC Inspection Procedures
- 58 Post Dive - BC Cleaning
- 59 Storage

# IMPORTANT INFORMATION

## IMPORTANT WARNINGS

### WARNING

This manual, and its complete version, which can be downloaded from [www.scubapro.com](http://www.scubapro.com), must be read and understood in full before using the product. It is advised that you keep this manual in your possession during the entire life of your BC.

**FAILURE TO READ, UNDERSTAND, AND FOLLOW THE PRECAUTIONS LISTED IN THIS MANUAL COULD RESULT IN SERIOUS INJURY OR DEATH.**

### WARNING

When diving you must follow the rules and apply the skills taught by a recognized scuba diving certification agency. Before taking part in any diving activity, it is mandatory to have successfully completed a scuba diving course covering both theoretical and technical aspects of diving.

### WARNING

**This instruction manual does not replace a diving instruction course!**

## EUROPEAN CERTIFICATION

All SCUBAPRO BCs described in this manual have obtained the European certification, according to European rules regulating the conditions for the release on the market and the fundamental safety requirements for second category Personal Protective Equipment (PPE).

Certification tests have been conducted according to the EN1809 harmonized standard, to ensure the compliance of the products to the fundamental requirements for health and safety set by European regulation 2016/425/EU.

The CE and EN1809 marks on the product denote the conformity to said requirements.

The Manufacturer of SCUBAPRO BCs is:

SCUBAPRO EUROPE Via Tangoni 16 16030 Casarza Ligure (GE) Italy, or SCUBAPRO GERMANY & E. Europe Johnson Outdoors Vertriebsgesellschaft mbH Bremer Straße 4 90451 Nuremberg GERMANY.

### WARNING

In accordance with European standards, our BCs can only be considered certified where all components are present, as per the original SCUBAPRO configuration, including the low pressure hose supplied. Any variation of the original configuration invalidates conformity to European certification standards.

## GENERAL INFORMATION

### WARNING

**THIS BC IS NOT A LIFEJACKET OR A RESCUE DEVICE.**  
Emergency face-up floatation may not be provided for all wearers and in all conditions.

## GENERAL INFORMATION

### WARNING

Ensure that you have fully understood the jacket's function and features and adjust the straps appropriately before diving. If in doubt, ask your official SCUBAPRO dealer for help.

### WARNING

This BC is not a breathing device.  
Never breathe from the BC.  
Your BC may contain gas residue, liquid, or contamination that may result in injury or death if inhaled.

### WARNING

Do not use your BC as an assist or "lift bag" for bringing objects to the surface. These objects may be lost during the ascent, creating a sudden increase in buoyancy and loss of buoyancy control.

### WARNING

**DO NOT DIVE** with a BC that does not pass any of the Pre-Dive, Dive or Post-Dive inspection points and tests. Loss of buoyancy control or air holding integrity could occur, resulting in serious injury or death.

## GENERAL INFORMATION

### WARNING

**KEEP WATER OUT OF THE INFLATABLE AIRCELL OF THE BC.** Repeated use of the oral valve or the Overpressure Valve may allow water inside the BC, reducing the amount of buoyancy provided by the BC. This could result in injury or death. Drain all water out of the BC prior to every use.

### WARNING

**ADJUST THE BC SO THAT IT DOES NOT RESTRICT YOUR BREATHING WHEN FULLY INFLATED.** Restriction of normal breathing while wearing your BC could result in injury or death. Before each use, check all bands, straps, quick-connect clips, and/or cummerbund for proper adjustment to the user.

### WARNING

**DO NOT DIVE** with a BC that is damaged, leaks air, or does not function properly. Terminate any dive as safely and quickly as possible if the BC becomes damaged, leaks air, or does not function properly.

### WARNING

The Ecoweight and Removable Pockets must be perfectly secured with the buckles fully and correctly engaged: the loss of the pocket during diving causes positive buoyancy and uncontrolled ascent that could result in injury or death.

## IMPORTANT CAUTIONS

For your protection while using SCUBAPRO life support equipment, we direct your attention to the following:

1. Use the equipment according to the instructions contained in this Manual and only after having completely read and understood all instructions and warnings.
2. Use of the equipment is limited to the uses described in this manual or for applications approved in writing by SCUBAPRO.
3. Cylinders must only be filled with atmospheric compressed air, according to the EN 12021 norm. Should moisture be present in the cylinder, beside causing corrosion of the cylinder, it may cause freezing and subsequent malfunction of the regulator during dives carried out in low temperature conditions (lower than 10°C (50°F)). Cylinders must be transported according to local rules provided for the transport of dangerous goods. Cylinder use is subjected to the laws regulating the use of gases and compressed air.
4. Equipment must be serviced by qualified personnel at the prescribed intervals. Overhauls must be documented. Repairs and maintenance must be carried out by an Authorized SCUBAPRO Dealer service facility and with the exclusive use of original SCUBAPRO spare parts.
5. Should the equipment be serviced or repaired without complying with procedures approved by SCUBAPRO or by untrained personnel or not certified by SCUBAPRO, or should it be used in ways and for purposes other than specifically designated, liability for the correct and safe function of the equipment transfers to the owner/user.
6. The content of this manual is based upon the latest information available at the time of publishing. SCUBAPRO reserves the right to make changes at any time.
7. All dives must be planned and carried out so that at the end of the dive the diver will still have a reasonable reserve of air for emergency use. The suggested amount is usually 50 bars (725 psi).

### DISINFECTION

SCUBAPRO recommends McNett Revivex. Use according to the procedure and dilution described on its packaging.



## WARRANTY

SCUBAPRO warrants to the original consumer purchaser that, for the period of one year from date of purchase, each SCUBAPRO product component not otherwise warranted, and each SCUBAPRO replacement part, purchased from and authorized SCUBAPRO dealer, will be free from defects in materials and workmanship under normal use and with reasonable maintenance. This warranty does not apply to any product or part used commercially.

If your purchase was made in Europe, SCUBAPRO complies with all laws governing European product guarantee and warranty, which generally stipulates that all products have an automatic 2-year guarantee with proof of purchase, not limited to the original owner. However, SCUBAPRO regulators and Twin Jet Max fins are covered by the SCUBAPRO Limited Lifetime Warranty and are guaranteed against any and all defects in materials and workmanship in accordance with the conditions fully described in the Conditions of Warranty you received with the regulator at the time of purchase. This warranty is valid only to the original owner and you must have your regulator serviced annually by an Authorized SCUBAPRO Dealer to maintain the lifetime warranty. It is valid through an Authorized SCUBAPRO Dealer worldwide.

SCUBAPRO will, at its option, repair or replace without charge any warranted component or replacement part that is defective in materials or workmanship. Repair or replacement is SCUBAPRO's only responsibility and your only remedy under this warranty.

This warranty does not cover damage resulting from improper usage, improper maintenance, neglect of care or maintenance or repair service performed by someone other than an Authorized SCUBAPRO dealer.

**ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.**

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**SCUBAPRO SHALL NOT BE LIABLE FOR LOSS OF USE OR ANY OTHER INCIDENTAL, CONSEQUENTIAL, OR INDIRECT COSTS, EXPENSES OR DAMAGES.**

Some states do not allow the exclusion or limitation of incidental or consequential

## WARRANTY

To obtain warranty services, you must deliver the affected component or part, together with your Original Owner Identification Card (for a component) or other proof of purchase to any Authorized SCUBAPRO dealer, to SCUBAPRO 1166-A Fesler Street, El Cajon, CA 92020 or to any other SCUBAPRO factory in the United States, Europe, or Asia. If you send the component or part to a SCUBAPRO factory, you must pay the shipping charges to the factory.

If any further details are required regarding your lifetime warranty, please contact your nearest SCUBAPRO Authorized Dealer or SCUBAPRO direct.

SCUBAPRO refuses all responsibility for damages caused by non-compliance with the instructions contained in this manual. These instructions do not extend the warranty or the responsibilities stated by SCUBAPRO Terms of Sales and delivery.

## PRODUCT REGISTRATION

In order to better maintain your lifetime warranty and to receive product updates and news, we recommend that you register certain or all products purchased, such as regulators, computers and the Twin Jet Max fins. By registering your products, you receive the latest product updates & news information and you don't have to worry about keeping your receipt around for ages, in case you ever need to use the warranty service.

## REPAIRS

In the event that you experience a fault with any SCUBAPRO product within the warranty period, please return the product to the Dealer you purchased it from, or to your nearest Authorized SCUBAPRO Dealer, so that they can arrange repair or replacement as appropriate.

# ALL ABOUT HYDROS PRO

## DESIGN & FEATURES

A technological breakthrough in BC design and construction, HYDROS PRO is a Premium Plus back-inflation BC designed for professional and serious recreational divers. Its ground-breaking design also makes it extremely travel-friendly without compromising quality, durability or performance.

### FLUID FORM INNOVATION

HYDROS PRO features an exclusive FLUID-FORM 3D Injection Moulded Monprene® Gel Harness that conforms to the shape of the body for extreme comfort. FLUID-FORM replaces the traditional Cut, Make & Trim (CMT) method of manufacturing BC's by replacing stitched fabric with soft, resilient Thermoplastic Elastomer harness components and then assembling them in a modular, mechanical process.

### PRIMARY FEATURES



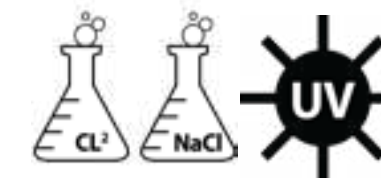
#### 1. INSTANT DRY

Ideal for travel due to less water retention & lower post-dive weight.



#### 2. ULTRA DURABLE

Fabric-free harness offers unbeatable durability and is extremely resistant to UV, chemicals and abrasion.



#### 3. BC-4-LIFE MODULAR DESIGN

Customisable to add/remove weight systems, straps & pouches whilst extending the BC's lifespan due to simplified repairs.

## DESIGN & FEATURES

### SECONDARY FEATURES



#### 1. 3D ERGONOMIC DESIGN

Fluid-Form gel harness conforms to the shape of the body for extreme comfort.



#### 2. LIGHTWEIGHT

Advanced materials keep the BCs weight low without compromising durability.



#### 3. NEUTRALLY BUOYANT

Near-zero inherent buoyancy means that less lead is required.



#### 4. BODY GRIP GEL

The Monprene® Gel grips to the diver's torso, providing unrivalled stability and preventing the BC from shifting and riding up.

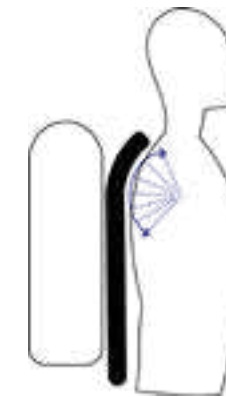
## DESIGN & FEATURES

### HARNESS FEATURES



#### 1. DUAL-COMPOUND BACKPLATE

Soft Monprene® Gel on the backplate provides ultimate stability and comfort. The rigid plate allows for the use of a single tank strap.



#### 2. TORSO-FLEX ZONE

Follows the upper back curvature and auto-adjusts to the torso length for excellent comfort and freedom of movement.



#### 3. ARTICULATED SHOULDER STRAPS

Rotating buckles and a rotating lower attachment point on the Shoulder Straps allow them to auto-adjust to the torso shape for excellent comfort and freedom of movement.



#### 4. KIT-UP ASSIST

An exclusive hinge system where the Shoulder Straps join the Backpack holding the shoulder straps open for easy donning but also allows the Shoulder Straps to fold flat so the BC packs up small for travel.



# DESIGN & FEATURES

## iQ AIR CELL FEATURES



### 1. CROSS FLOW

A full-donut Cross Flow design creates unrestricted internal Air-Flow to help reduce air-trapping, aid manoeuvrability and allow for easy deflation at any angle.

### 2. 2-STAGE INFLATION

Air distribution is controlled by the Tri-Bungee system that utilises three Bungee Cords running horizontally across the diver's back to effectively provide two different inflation profiles. This allows for a more compact and streamlined system underwater yet high-lift capacity at the surface or on deeper dives. The Tri-Bungee System is also self-centering, preventing air from getting trapped on one side of the air cell.

When partially inflated (Stage 1), the BC looks and feels like a much lower volume BC, making buoyancy control easier by reducing air-movement and air-trapping. This improves manoeuvrability and allows for faster, more efficient deflation.

When fully-inflated (Stage 2), the Bungee Cords allow the air cell to open up and provide maximum lift capacity.

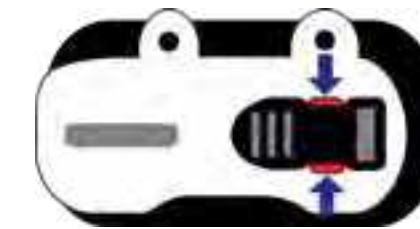
### 3. DORSAL WEIGHT-WING

The outside of the air cell includes a robust Weight-Wing that protects the air cell against abrasion and accommodates 2 x 2kg (4.5lbs) Outboard mounted Trim Weight Pockets. Mounting the Trim Weights on the outboard side of the air cell assists with achieving a vertical position at the surface.



# DESIGN & FEATURES

## SYSTEM FEATURES



### 1. BUCKLE WEIGHT SYSTEM

Simple, safe and reliable Quick-Release buckles use a fixed location for easy one handed operation



### 2. QUICK SWITCH SYSTEM

Quickly and easily change the configuration from a minimalist Trav-Tek System to a Buckle Weight System, or vice versa.



### 3. SMART-PACK DESIGN

Unbelievably compact for easy transport and storage with its folding shoulder and waist straps.



### 4. MULTI-MOUNT ACCESSORY MATRIX

Multiple D-Ring and mounting points that easily attach various dive accessories.

## SPECIFICATIONS

### DRY WEIGHT

Set up with Weight System Waist Strap	3.9kg / 8.5lbs
Set up with Travel System Waist Strap	2.9kg / 6.5lbs

### LIFT CAPACITY

Ladies XS-S & Medium, Mens Small	160N / 35lbs
Ladies Large, Mens Medium to XL-XXL	180N / 40lbs

### WEIGHT SYSTEM CAPACITY

Buckle Weight System	2 X 4.5kg / 10lbs
Rear Trim Weight Pockets	2 X 2kg / 4.5lbs

### CYLINDER CAPACITY

Single Cylinder	1 X 18litre
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### OPERATING TEMPERATURE RANGE

AIR	-20°C to +50°C	-4° F to 122° F
WATER	-2°C to +40°C	+40° F to 28° F

## SPECIFICATIONS

### LOW PRESSURE HOSE AND PNEUMATIC INFLATION VALVE

LP hose and Pneumatic Inflation Valve operating pressure	95-200psi (6.5-13.8bar)
Low Pressure Hose Fitting threads	3/8-24 UNF
O-Rings-Seals	EPDM - Buna/Nitrile - Silicone

### WARNING

This product is designed to use air or nitrogen/oxygen mixtures containing up to 40% oxygen. Use of gas mixtures with increased oxygen, or the addition of helium or other substances, may cause corrosion, deterioration, premature aging or component failure of metal and rubber parts. These actions may result in loss of buoyancy control or air holding integrity of the BC, resulting in injury or death. Non-standard gas mixtures may also present a risk of fire or explosion. Use only nitrogen/oxygen mixtures containing up to 40% oxygen.

### WARNING

Special instruction in cold water diving methods, and the specific use of this product in cold water is required prior to cold water diving (temperatures below 10°C/50° F). This instruction is beyond the scope of this manual.

# GETTING STARTED

## INITIAL SET UP

### SYSTEM SET UP - SELECT WEIGHT SYSTEM OR TRAVEL SYSTEM

Your HYDROS PRO is actually 2 BCs in 1! It is supplied with two different Waist Strap systems that enable you to configure the BC for your exact type of diving and to quickly and easily change between the two systems as your diving environment changes.

System 1 is a full weight integrated system that uses our patented Buckle Weight System. System 2 is a minimalist, Travel waist strap similar to what Technical divers use.

#### TO CHANGE FROM ONE SYSTEM TO THE OTHER:

- a. Disconnect the shoulder strap quick-release buckles.
- b. Release and remove the grey plastic snap-clip that secures the waist webbing to the backpack.
- c. Pull the waist strap you are removing away from the BC, the webbing will pull out of the slot on the backpack.
- d. Thread the back end of the waist webbing (from the system you want to add) through the slot on the backpack, passing from the front (diver side) to the rear (cylinder side) and without trying to pass through the opening in the soft Lumbar Pad.
- e. Replace the plastic snap-clip by sliding it through the loop in the webbing and then snapping it closed.
- f. Re-connect the shoulder strap buckles.



## INITIAL SET UP



## INITIAL SET UP

### CONNECT LOW PRESSURE (LP) HOSE TO REGULATOR

Connect the low pressure (LP) Hose of the Power Inflation Valve or A.I.R. 2 to an unused LP Port of the first stage. Ensure that the thread of the hose matches the thread of the LP port.



### WARNING

Do not attach a L.P. hose to a SCUBA regulator high pressure (HP) port or to an air supply with pressure in excess of 200 psi (13.8 bar). This may result in damage or explosive failure of the Inflation Valve or Low pressure Hose, which could result in injury or death.

## INITIAL SET UP

### HARNESS SET UP – INITIAL PERSONAL ADJUSTMENT

Your HYDROS PRO features a highly-adjustable, alpine-style harness. To get the best results, you should fine tune your HYDROS PRO to suit your body type and size:

#### 1. WAIST STRAP ADJUSTMENT

a. Put the BC on, place the waist strap low on your waist, fasten the waist buckle and then tighten the strap until snug by pulling the plastic D-ring to your left.

b. If the strap is too SHORT:

- i. There is an extra length of webbing stowed in the right hand waist pad.
- ii. Pull some of the spare webbing out and reposition the right side (female) buckle on the webbing so that it increases the effective length of the waist strap.



## INITIAL SET UP

c. If the strap is too LONG:

- i. The waist pads can be adjusted to be closer to the backpack, thus shortening the effective length of the waist strap.
- ii. Release and remove the grey plastic snap-clip that secures the waist webbing to the back pack.
- iii. Pull more waist webbing through the slot in the back pack so that the next adjustment position is exposed.
- iv. Replace the plastic snap-clip by sliding it through the loop in the webbing and the snapping it closed.
- v. Ensure you adjust both sides evenly so that the BC fits you symmetrically.





## INITIAL SET UP

### 2. STERNUM STRAP HEIGHT

- a. Fasten the sternum strap buckle and tighten the strap by pulling the plastic D-ring to your left.
- b. Tightening the sternum strap adjusts where the shoulder straps will sit on your shoulders. The correct adjustment pulls the shoulder straps together just far enough that they do not restrict your arm movement.
- c. Evaluate the height of the sternum strap:
  - i. If it sits too close to your throat, it is too HIGH.
  - ii. If it causes the shoulder straps to bulge and not sit flush on your chest, the strap is probably too LOW.
- d. If necessary, adjust the height of the sternum strap:
  - i. Insert a small, flat screwdriver into the slot between the sternum link plate and the sternum strap buckle.
  - ii. Use the screwdriver to lever the link plate off the buckle.
  - iii. Adjust the sternum buckle up or down to the desired, pre-determined attachment points.
  - iv. Replace the link plate into the buckle. Ensure that the plate is inserted all the way and sits flush against the buckle.
  - v. Ensure you adjust both sides evenly so that the BC fits you symmetrically

## INITIAL SET UP



## UTILITY & CUSTOMIZATION

### 1. STAINLESS STEEL D-RINGS

HYDROS PRO is equipped with 6 Stainless Steel D-rings to allow for attaching extra equipment and accessories in easily accessible locations.

These D-rings are mounted directly onto the Military-grade webbing so that any load is applied directly to the harness.

1. **Shoulder D-rings** - Pre-bent and Height-adjustable.
2. **Lower Waist D-rings** - Primary load-bearing attachment point.
3. **Upper Waist D-rings** - These are used to provide a lower articulation point for the Shoulder Straps but are also ideal for attaching accessories or streamlining hose routing.

### 2. SPECIALITY D-RINGS

1. **Octo & Gauge D-rings** - These are mounted on the Shoulder Strap buckles specifically in order to position your Octopus in the easily visible & accessible 'Golden Triangle'.
2. **Lumbar D-rings** - Two eyelets in the Lumbar Plate allow you to mount an SMB in the small of your back for ultimate streamlining yet ease-of-access when needed. These are best used with our Bungee Cord accessories or an SMB pouch.
3. **Dorsal D-rings** - Four eyelets mounted on the Tank Plate allow for the attachment of SMBs, Battery Packs or any other accessories that you wish to mount next to your cylinder.

## UTILITY & CUSTOMIZATION

### 3. AVAILABLE ACCESSORIES



#### 1. KNIFE & ACCESSORY MOUNT PLATE

Attaches to the Multi Mount Matrix - Ideal for attaching BC Knife.



#### 2. MINI D-RING SET

Attaches to the Multi Mount Matrix - Best used with Bungee Cord sets, carabiners and Magnetic Quick Clips and is ideal for attaching Marker Buoys, Torches and for streamlined hose routing.



#### 3. ACCESSORY BUNGEE SET

Ideal for torches, marker buoys, octo hoses and streamlined hose routing. Available in 2 sizes.



## UTILITY & CUSTOMIZATION



### 4. CARGO THIGH POCKET

Quick attachment via carabiner & thigh strap. Ideal for slates, torches, marker buoys, compact cameras and features an internal D-Ring for securing valuable items.



### 5. NINJA POCKET

Attaches to the Multi Mount Matrix - A roll-out pocket that is there when you need it but out of the way when you don't, it's ideal for slates, torches, marker buoys, compact cameras.

### 4. CROTCH STRAP MOUNT

The Lumbar Plate includes an integrated bar that is designed to fit a 50mm Crotch Strap.

## SMART PACK SYSTEM

Using a Smart-Pack design, the HYDROS PRO is unbelievably compact for easy transport and storage. The shoulder and waist straps fold flat allowing the BC to pack into the wing, and thus easily fitting into a small bag such as the Carry-On Backpack that is included with each HYDROS PRO BC.

### HOW TO PACK YOUR HYDROS PRO:

1. OPEN BC FLAT.



3. FOLD LEFT SHOULDER STRAP.



2. FOLD RIGHT SHOULDER STRAP.



3. FOLD LEFT SHOULDER STRAP.





# SMART PACK SYSTEM

5. FOLD RIGHT WAIST PAD.



6. WRAP AIR CELL WITH TANK LOCATOR STRAP.



7. OPTIONAL - WRAP CINCH BAND AROUND BC.



OPERATION - KIT UP & GO

## SINGLE CYLINDER ATTACHMENT

The SCUBAPRO Super Cinch Quick Adjust cylinder strap allows you to easily fasten your BC to any single SCUBA cylinder by following these steps:

- a. Wet the webbing of the Super Cinch Q.A. cylinder strap.
- b. Hook the Tank Locator Strap over the cylinder valve, position the BC so that the cylinder rests against the Tank Grips and then adjust the Tank Locator Strap to provide the desired cylinder height relative to the BC.
- c. Open the stainless steel buckle then wrap the strap around the cylinder and hook the stainless steel D-ring onto the stainless steel buckle.
- d. Lever the buckle closed, tightening the strap in the process.
- e. If the strap is too tight to close or too loose, open the buckle and adjust the strap length by releasing the Velcro and repositioning the D-ring. Re-fasten the loose end of the strap using the Velcro sections and for extra safety, slide the plastic loop over the webbing end.
- f. To test the security of the cylinder, lift the assembly by the BC back pack handle and shake firmly. If there is movement between the BC and the cylinder, the strap is not tight enough.



## SINGLE CYLINDER ATTACHMENT

### WARNING

To prevent accidental loss of the cylinder, ensure the strap is done up tightly enough so that the cylinder cannot move or slide on the BC. Failure to do so could result in injury or death.

### WARNING

Soak the webbing of the SCUBA air cylinder strap and then tighten prior to each use of the BC. Webbing may stretch when initially exposed to water. Failure to soak the webbing may allow the cylinder strap to loosen around the SCUBA air cylinder.

### WARNING

Check the correct positioning and the correct tightening of the tank straps before starting to dive.



## TWIN CYLINDER ATTACHMENT



### NOTE:

The HYDROS PRO is not currently CE Certified for Twin Cylinder use.

### FOR NON-EUROPEAN REGIONS:

The HYDROS PRO is designed to be dived with twin cylinders up to 2 X 10 litre capacity, or with a combined weight of up to 30kg / 65lbs.

Two stainless steel female bushes with an M8 thread are provided on the outside of the Tank Plate to allow you to attach twin cylinders.

## VALVE SYSTEM

SCUBAPRO BCs are equipped with a Power Inflation Valve that is connected to the cylinder via the first stage regulator and makes it possible to control buoyancy in the water by inflating and deflating the BC using inflate and deflate buttons.

As standard, the HYDROS PRO is fitted with our premium Balanced Power Inflator (BPI). Alternatively, users can fit the AIR2 system which incorporates an Alternate Air Source and replaces the BPI. The AIR2 offers the same buoyancy control features as the BPI.

Connecting the BPI or AIR 2 allows you to inflate your BC using air from your SCUBA cylinder. Its LP hose, threaded on a LP Port of the first stage regulator, is connected to the Power Inflation Valve by the Quick Disconnect Coupling.

BPI



AIR2



## VALVE SYSTEM

### VALVE SYSTEM SET UP

#### TO ATTACH THE QUICK DISCONNECT COUPLING:

- Ensure the air supply is turned off at the cylinder valve and that the air pressure is purged from the regulator system.
- Make sure that both fittings are free of contamination prior to mating them together.
- Pull back the collar of the Quick Disconnect Coupling, while pushing the hose firmly onto the Inlet found on the Power Inflation Valve.
- Release the collar when the Coupling is fully seated on the Inlet. Pull gently but firmly on the hose to check for a secure connection.



#### TO DISCONNECT THE QUICK DISCONNECT COUPLING:

- Ensure the air supply is turned off at the cylinder valve and that the air pressure is purged from the regulator system.
- Pull the Quick Disconnect Coupling Collar back and disengage the LP Hose and Coupling from the plug.

## VALVE SYSTEM

### WARNING

AIR2 uses a dedicated quick disconnect coupling. When using AIR2 be sure to use only the SCUBAPRO dedicated hose supplied with the specific quick disconnect coupling.

### WARNING

KEEP WATER OUT OF THE INFLATABLE AIRCELL OF THE BC. Repeated use of the oral valve or the Overpressure Valve may allow water inside the BC, reducing the amount of buoyancy provided by the BC. This could result in injury or death. Drain all water out of the BC prior to every use.

### WARNING

KEEP SAND AND OTHER CONTAMINATION OUT OF THE ORAL VALVE MOUTHPIECE AND VALVE BUTTON. Under certain conditions, contamination can cause the valve to not close completely. If this occurs while diving, shake the valve while depressing it several times. If the valve leaks or remains inoperable, terminate the dive. Diving with a leaking Buoyancy Compensator or with valves that do not operate properly may result in a loss of buoyancy control that could result in injury or death.

## VALVE SYSTEM

### INFLATION

There are two separate ways to inflate your BC. Firstly, Power Inflation which uses air supplied from your cylinder by your regulator, and secondly, Oral Inflation which relies on exhaled air from your lungs. Both methods are provided for on BPI and AIR2 units.

The Oral Valve is an integral part of the Power Inflation Valve. Use of this valve for inflation is recommended on the surface, or on land prior to diving. It may be used when you cannot, or do not wish to add air to the BC with air from your cylinder through the Power Inflation Valve.

#### POWER INFLATION:

- a. To inflate the BC, press the Inflate Button on the Power Inflation Valve, allowing air to flow from your regulator into the BC.
- b. The Inflate Button operates progressively, press lightly for slower flow of air into the BC or depress it completely for maximum response.



#### ORAL INFLATION:

- a. Exhale into the mouthpiece of the Power Inflation Valve while deeply depressing the Deflate / Oral-Inflation Button.
- b. Release the Deflate / Oral-Inflation Button.
- c. Inhale fresh air and repeat the above steps until the desired amount of buoyancy is reached.



## VALVE SYSTEM

### DEFLATION

There are five separate ways to deflate your HYDROS PRO BC:

#### UPPER RIGHT SHOULDER DUMP VALVE:

- a. Stop and assume an upright position in the water.
- b. Locate the knob situated more or less mid-way on the right shoulder strap.
- c. Pull gently on the knob, activating the Dump Valve in the process.
- d. Activate the Dump Valve until the desired amount of buoyancy is reached.
- e. The valve operates progressively, a very gentle pull will release air slower while a complete pull will deflate faster for your initial descent or to arrest a fast ascent.
- f. Stop pulling to close the valve.





## VALVE SYSTEM

### LOWER LEFT LUMBAR DUMP VALVE:

- a. This valve can be operated in a horizontal or heads-down orientation.
- b. Locate the knob situated at the lower, left edge of the Air-Cell.
- c. Pull gently on the knob, activating the Dump Valve in the process.
- d. Activate the Dump Valve until the desired amount of buoyancy is reached.
- e. The valve operates progressively, a very gentle pull will release air slower while a complete pull will deflate faster for your initial descent or to arrest a fast ascent.
- f. Stop pulling to close the valve.



## VALVE SYSTEM

### SCUBACONTROL PULL DUMP:

- a. Stop and assume an upright position in the water.
- b. Pull gently on the Power Inflation Valve.
- c. It is not necessary to use excessive pulling pressure. Valve Travel is limited and pulling harder will not increase the air flow.
- d. To close the valve, stop pulling downward.



## VALVE SYSTEM

### DEFLATE/ORAL-INFLATION BUTTON:

- a. Stop and assume an upright position in the water.
- b. Raise the Power Inflation Valve above and in front of your face so that it sits above shoulder height.
- c. This insures the Power Inflation Valve will be positioned above the air bubble in the BC.
- d. Depress the Deflate / Oral-Inflation Button and visually confirm that air is escaping from the mouthpiece. For best control, let air out slowly or in a series of short, measured amounts while observing the effects on your buoyancy.



## VALVE SYSTEM

### BUDDY DUMP BUTTON:

- a. Push down on the button that protrudes out of the SCUBACONTROL elbow valve casing on top of the left shoulder.
- b. This system could be useful to assist another diver having problems (e.g. panic, beginner diver, unconsciousness, etc.).



### WARNING

The SCUBAPRO Dual Dump Manual Dump Valve (Patent) has a safety hand button that releases air when pushed, in case of failure of the Manual Dump System (broken cable, pin etc.) or while breathing from an AIR2.

With all deflation methods, hold the valve open no longer than needed. This helps prevent excess water from entering the BC.

Do not depress the Oral Valve button when activating the Manual Dump valve, as water may enter the BC through the Oral Valve mouthpiece.

### WARNING

The deflation devices with the maximum outflow of gas are the Upper Right Shoulder Dump Valve and the Lower Left Lumbar Dump Valve.



## VALVE SYSTEM

### OVER PRESSURE VALVE OPERATION

Over Pressure Valves prevent over-inflation of the BC. If the internal pressure exceeds the spring pressure in one of the Over Pressure Valves, the valve automatically opens and releases air to prevent damage to the BC. The Valve will automatically close when the internal pressure drops back below the spring pressure.

## WEIGHT SYSTEM

The total weight a diver requires to descend from the surface and achieve neutral buoyancy depends on various factors, each of which should be taken into consideration when determining the ideal amount of ballast;

- a. Diver's inherent buoyancy.
- b. Exposure suit thickness and inherent buoyancy.
- c. Cylinder type (steel versus aluminium), size and buoyancy characteristics.
- d. Water salinity.

Your SCUBAPRO HYDROS PRO is fitted with two available weight carrying systems. Once you know what your total weight requirement for a specific dive will be, you can elect whether to use none, one or both of the available systems:

## WEIGHT SYSTEM

### BUCKLE WEIGHT SYSTEM

Accommodates 2 X 4.5kg / 10lbs in pockets that fit into the Weight Holsters of the HYDROS PRO. The pockets are secured with mechanical quick-release buckles and can be ditched easily when exiting the water or in emergencies.

#### TO LOAD THE BUCKLE WEIGHT SYSTEM:

- a. Insert the desired amount of weight into the zippered Weight Pockets and completely close the zippers.
- b. Distribute the weight evenly between left and right pockets to promote even trim underwater.
- c. It is advisable to use soft weights such as SCUBAPRO Eco Weights as they reduce wear of the BC pockets and are more comfortable. The sealed SCUBAPRO Eco Weights have the added environmental benefit of preventing lead contact with the water.
- d. Slide the loaded Weight Pockets into the Weight Holster, ensuring it is pushed in all the way to the back of the holster.
- e. Snap-fit the female buckle on the Weight Pocket onto the red male buckle on the Weight Holster.
- f. Gently take up the slack in the webbing by pulling on the plastic D-ring. It is not necessary to overtighten the webbing.

**Note:** Many divers find it easier to don the BC first, and then load the weight Pockets into the BC so that they never have to handle the fully-weighted BC.

## WEIGHT SYSTEM



### TO DITCH THE BUCKLE WEIGHT SYSTEM:

- To remove the Weight Pockets from the Weight Holsters, simply squeeze the red release tables and pull the buckle outward and away from your body in one fluid movement.
- The Weight Pockets will slide out of the Weight Holsters.
- This method can be used at the surface or underwater, whether for routine doffing or emergency ditching of weight.

## WEIGHT SYSTEM

### REAR TRIM WEIGHT POCKETS

Accommodates 2 X 2kg / 4.5lbs in dorsally mounted, non-ditchable pockets that assist in achieving vertical flotation at the surface and also in achieving horizontal trim when swimming underwater.

### TO USE THE REAR TRIM WEIGHT POCKETS:

- Insert the desired amount of weight into the pockets and secure the lids with the quick-release buckles.
- Distribute the weight evenly between left and right pockets to promote even trim underwater.
- It is advisable to use soft weights such as SCUBAPRO Eco Weights as they reduce wear of the BC pockets and are more comfortable. The sealed SCUBAPRO Eco Weights have the added environmental benefit of preventing lead contact with the water.

**Note:** These weights are not ditchable during the dive.



## WEIGHT SYSTEM

### WARNING

The Ecoweight and Removable Pockets must be perfectly secured with the buckles fully and correctly engaged: the loss of the pocket during diving causes positive buoyancy and uncontrolled ascent that could result in injury or death.

### WARNING

Practice fastening and releasing the weight pockets several times before diving.

### WARNING

BACK COUNTER WEIGHTS ARE NOT DESIGNED TO BE RELEASED IN AN EMERGENCY. Failure to create adequate positive buoyancy in an emergency situation may result in injury or death. The user of the BC must configure the entire diving system in a manner that provides the means for rapidly and easily creating positive buoyancy as an aid for emergency ascent.

## PRE-DIVE ADJUSTMENT

Your HYDROS PRO BC is equipped with adjustable quick-release buckles at the waist, shoulder and chest (sternum). To ensure maximum safety, comfort and performance, your BC should be properly adjusted when kitting up for each dive by following these steps in the correct order:

### 1. WAIST STRAP ADJUSTMENT

- a. Put the BC on.
- b. Place the waist strap low in your waist and fasten the waist buckle.
- c. Tighten the strap until snug by pulling the plastic D-ring to your left.
- d. To release tension, lift the front edge of the buckle to allow the webbing to pass back through the buckle.



## PRE-DIVE ADJUSTMENT

### 2. STERNUM STRAP ADJUSTMENT

- a. Fasten the sternum strap buckle.
- b. Tighten the strap by pulling the plastic D-ring to your left.
- c. Tightening the sternum strap adjusts where the shoulder straps will sit on your shoulders. The correct adjustment pulls the shoulder straps together just far enough that they do not restrict your arm movement.
- d. Do not over-tighten the Sternum Strap.
- e. To release tension, lift the front edge of the buckle to allow the webbing to pass back through the buckle.



## PRE-DIVE ADJUSTMENT

### 3. SHOULDER STRAP ADJUSTMENT

- a. Take up the slack in the Shoulder Strap webbing by pulling downwards on the plastic D-rings.
- b. Do not overtighten the shoulder straps as that will pull the Waist Strap up and out of the optimal position just above your hips and as a result the comfort and stability of the system will be compromised.
- c. To release tension, lift the front edge of the buckle to allow the webbing to pass back through the buckle.



### WARNING

**ADJUST THE BC SO THAT IT DOES NOT RESTRICT YOUR BREATHING WHEN FULLY INFLATED. Restriction of normal breathing while wearing your BC could result in injury or death. Before each use, check all bands, straps, quick-connect clips, and/or cummerbund for proper adjustment to the user.**



# CARE & MAINTENANCE

## GENERAL CARE

### INSPECTION & SERVICE INTERVAL

Your BC should be inspected and maintained at an Authorized Service Centre at least once a year, more often if you dive frequently. Any damage caused due to failure to properly maintain the BC is not covered by the warranty.

#### WARNING

Always perform a pre-dive and post-dive inspection of the BC.

#### WARNING

Due to heavy usage, BCs used for rental/diving centres, professional purposes or other intensive use must be checked at least every 6 months. Overall conditions and main safety parts such as the bladder, valves, elbow, corrugated hose, BPI must be inspected. If any of the above parts shows wear or diminished performance it should be replaced immediately or removed from usage, if replacement is not possible.

#### WARNING

**DO NOT DIVE** with a BC that is damaged, leaks air, or does not function properly. Terminate any dive as safely and quickly as possible if the BC becomes damaged, leaks air, or does not function properly.



## BC INSPECTION PROCEDURES

### WARNING

**DO NOT DIVE with a BC that does not pass any of the Pre-Dive, Dive or Post-Dive inspection points and tests. Loss of buoyancy control or air holding integrity could occur, resulting in serious injury or death.**

Pre-dive, and post-dive BC Examination helps to identify equipment problems before unsafe conditions exist, preventing diving accidents. All equipment must be regularly inspected by an authorized SCUBA Equipment repair facility.

#### PRE-DIVE VISUAL INSPECTION AND VALVE TEST:

- a. Examine the entire BC For cuts, punctures, frayed seams, excessive abrasion, loose/ missing hardware and other damage of any kind.
- b. Check the proper tightening of the dump valves and the elbow ring.
- c. Inspect for cracks, damage, or contamination of the:
  1. Power Inflation Valve
  2. SCUBACONTROL elbow
  3. Corrugated Hose
  4. Dump / Over Pressure Valves.
- d. Operate the Power Inflation Valve with the LP Hose attached and charged with air pressure. Check for proper operation and resealing of:
  1. Power Inflate Button.
  2. Deflate / Oral-Inflate Button.
  3. SCUBACONTROL Pull Dump Valve.
  4. Buddy Dump Valve.
  5. Upper and lower Dump Valves, checking the Over Pressure function by fully inflating the BC until excess air is released.

## BC INSPECTION PROCEDURES

- e. Inflate the BC Through the Oral Valve until it is firm. Listen and check for leaks. Let the BC Stand inflated for 30 Minutes or more, then check the BC for loss of air.
- f. Soak the Super Cinch cylinder strap in water and fit the BC to a SCUBA cylinder. Pull up on the BC while attached on the SCUBA cylinder, checking that the cylinder will not slip in the BC while diving.
- g. While wearing the BC, adjust the straps and other attachments on the BC for a comfortable fit that does not restrict breathing. Make these adjustments with the BC Inflated and while wearing the exposure suit you intend to dive with.
- h. Check the operation of the Buckle Weight System. Make sure that the retention systems are fully engaged and attached and that they can be released, and the Weight Pockets removed from your BC, very quickly if necessary.
- i. Check the mechanical buckles of the Rear rim weight Pockets to ensure they engage properly and hold the lids closed securely.

## POST DIVE - BC CLEANING

With Proper care and service, your BC should provide years of enjoyment.

### THE FOLLOWING MAINTENANCE AND CARE PROCEDURES MUST BE OBSERVED:

- a. Rinse the BC thoroughly, inside and out, with clean, fresh water after every use.
- b. Be sure to rinse the entire BC with by dipping in a tub or spraying with a hose.
- c. Do not use any aggressive solvents, disinfectants or cleaning agents.
- d. Fill the BC Inner Bladder, Approximately 1/4 full with clean fresh water through the Oral Valve.
- e. Orally Inflate the BC and rotate it to thoroughly rinse the inside of the BC.
- f. Hold the BC upside-down, depress the Deflate / Oral-Inflate Button, and allow all water and air to drain from the Oral Valve mouthpiece.
- g. Repeat one or two more times.
- h. Rinse all valves to make sure all sand and other debris is removed.

### WARNING

Avoid prolonged or repeated exposure to chlorinated water, such as in swimming pools. Wash your BC immediately after any use in chlorinated water. Chlorinated water can oxidize fabrics and materials on your BC, thereby shortening their life, and cause colors (especially neon) to fade. Damage and fading from prolonged exposure to chlorinated water is specifically not covered under warranty.

## STORAGE

- a. Dry the BC completely before storing.
- b. Store in a cool, dry place.
- c. Do not store in direct sunlight – Ultraviolet rays will shorten the life of the fabric and cause colours to fade.
- d. Store slightly inflated.
- e. Slightly grease the AIR2 and/or BPI Couplings with SCUBAPRO Lubricant Grease.



**SCUBAPRO<sup>®</sup>**

**DEEP DOWN YOU WANT THE BEST**

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