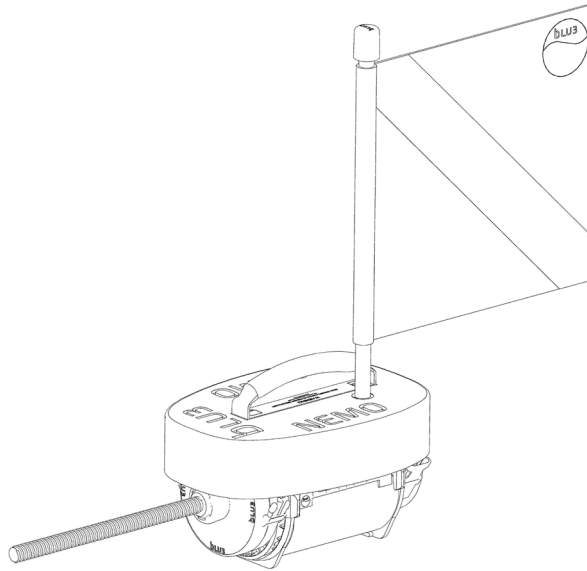


# Owner's - Users Manual

## NEMO

The World's Smallest Dive System



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For other languages and to find the most updated [diveblu3.com/owners-users-manuals](http://diveblu3.com/owners-users-manuals)

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### IMPORTANT

Read carefully before use.

Keep for future reference.



## **⚠WARNING**

**STRONG MAGNETS!** Persons with pacemakers or medical implants must stay back at least 2 feet (60 cm) from the NEMO main body. Magnets may interfere with pacemakers or medical implants.

# IMPORTANT:

Prior to diving, ALL Users must:  
Read and understand the NEMO Owner's - Users Manual,  
Complete the NEMO Fitness to Dive Evaluation and  
Complete the NEMO Online Dive Training Course

NEMO Online Dive Training Course available at:

*[diveblu3.teachable.com](https://diveblu3.teachable.com)*



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## 1 Explanation of Symbols

The following symbols will be used throughout the document and on BLU3 products to highlight critical information. Please pay careful attention to each instance of these symbols.

### **DANGER**

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

### **WARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### **CAUTION**

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

### **NOTICE**

Indicates practices and information that will help lead to the proper use of your NEMO.

### **NOTICE**

BLU3 shall not be responsible or liable for any damages, illness, injury or death caused by using NEMO. Follow the information in this Owner's - Users Manual and pay attention to the symbols listed above.

## 2 General Precautions and Important Safety Information

### **DANGER**

The user shall NEVER hold their breath while diving, especially while ascending toward the surface. Holding your breath while diving, and especially while ascending toward the surface, will lead to serious injury or death.

### **WARNING**

**STRONG MAGNETS!** Persons with pacemakers or medical implants must stay back at least 2 feet (60 cm). Magnets could interfere with pacemakers or medical implants.

### **WARNING**

NEMO is not intended for use by children younger than 8 years old. Users under 10 years old must be limited to a swimming pool only, in water shallow enough that they can stand up with their head above the water. Users who are under 18 years old must be constantly supervised by a parent or guardian when using NEMO. Failure to comply with age restrictions could result in serious injury or death.

### **WARNING**

All Users must completely read and understand this Owner's - Users Manual prior to using NEMO. The Owner's - Users Manual should be kept in possession with NEMO for the entire life of the product. Failure to comply with the instructions within this Owner's - Users Manual could result in serious injury or death.

### **WARNING**

Use of NEMO is limited to the uses described in this Owner's - Users Manual or for applications approved in writing by BLU3. Use of NEMO outside of the intended use statements could result in serious injury or death. *Refer to Section 3.2 on page 9 for the intended use statements.*

### **WARNING**

This Owner's - Users Manual is not a substitute for a diving instructional course. The user must successfully complete the NEMO Online Dive Training Course prior to first use. Failure to complete the NEMO Online Dive Training Course could result in serious injury or death.

### **WARNING**

NEMO shall only be operated by users who have completed the proper instructional course, NEMO Fitness to Dive Evaluation, and who have read and understand this Owner's - Users Manual. The owner of NEMO shall not share NEMO with users who do not meet these qualifications, and failure to follow these instructions could lead to serious injury or death of the user.

### **WARNING**

NEMO must only be used in areas where the intake air supply is clean and not contaminated by toxic fumes or gases. Contaminants entering the NEMO Snorkel Tube (air intake) will result in breathing contaminated air which may cause serious injury or death.

### **WARNING**

Rechargeable lithium ion batteries have an inherent risk of fire and explosion. Failure to follow the instructions of this Owner's - Users Manual and properly handle lithium ion batteries may result in serious injury or death.



### 3. Introduction

Congratulations on becoming one of the first people in the world to own NEMO - The World's Smallest Dive System! We thank you for helping us bring NEMO to life through your support of our crowdfunding campaign. This would not have been possible without the wonderful support of each one of our backers. Thank YOU!

This Owner's - Users Manual will provide you with the information and instructions necessary to operate the equipment. However, you are NOT permitted to operate the equipment until both the NEMO Fitness to Dive Evaluation and NEMO Online Dive Training course have been successfully completed. Follow the instructions of this Owner's - Users Manual carefully and only use NEMO within its intended use to ensure your safety.

#### 3.1. Product Description

NEMO by BLU3 is a small and compact dive system that supports one diver to a maximum depth of ten feet. NEMO is powered by a 14.4 volt, 72 watt-hour lithium ion battery pack. A waterproof connector provides for easy swapping of the Battery for unlimited diving time. The time duration of the Battery varies depending on the air consumption and depth of the user.

Typically a fully charged Battery will last between 60 and 90 minutes\*.

*\*Battery life time is dependent on the user. These values should be used for reference only.*

## 3.2 Intended Use

### 3.2.1 Who Can Use NEMO

NEMO is intended for use by people who are competent swimmers, at least 8 years old, in good health and have completed the NEMO Online Dive Training Course. Users under 10 years old must limit their NEMO Diving to a swimming pool only, in water shallow enough that they can stand up with their head above the surface. All Users under 18 years old must be constantly supervised by a parent or guardian when using NEMO. All Users must complete the NEMO Fitness to Dive Evaluation and NEMO Online Dive Training Course prior to use. All Users must thoroughly understand the content of this Owner's - Users Manual. The owner of NEMO shall not allow any person who does not meet these criteria to dive with NEMO.

Inside of NEMO are strong magnets that may interfere with pacemakers or medical implants. Persons with pacemakers or medical implants must stay at least 2 feet, or 60 centimeters, away from NEMO at all times and never operate NEMO. The user shall advise persons with pacemakers or medical implants if they are within the advised maximum proximity of NEMO.

### 3.2.2 Permissible Diving Conditions

Do NOT use NEMO in any conditions that may result in water entering the air intake. This includes, but is not limited to, diving in conditions in which waves will crash over the Snorkel Tube, diving under a waterfall, or conditions which could cause NEMO to flip over such as shore break waves or an area with large boat wakes.

Only use NEMO in calm weather and water conditions. The World Meteorological Organization (WMO) sea state code specifies sea states in relation to wave height and characteristics. NEMO is intended for use in WMO Sea State Codes of 0, 1, or 2. NEMO shall not be used in WMO Sea States higher than 2.

NEMO must be floating in the water during use. Operating NEMO out of water for extended periods of time will cause overheating. Do NOT operate NEMO outside of water for more than 20 seconds.

NEMO must only be used in areas where the intake air supply is clean and not contaminated by toxic fumes or gases. Contaminants entering the NEMO Snorkel Tube (air intake) will result in breathing contaminated air which may cause serious injury or death.

NEMO is intended to be used only in areas where there is sufficient space for the Air Hose and the floating unit to freely glide in the water and not become entangled with other objects or become punctured. As an example, do NOT use NEMO to dive through underwater caves or in areas with overhead structures such as around boat docks.



### 3.3. Before Your First Dive

Before using NEMO for the first time, you must read and understand this Owner's - Users Manual in its entirety and successfully complete both the NEMO Online Dive Training Course and the NEMO Fitness to Dive Evaluation that is supplied with this manual.

#### 3.3.1 NEMO Fitness to Dive Evaluation

The NEMO Fitness to Dive Evaluation provided with this Owner's - Users Manual is provided to confirm Users are medically fit to dive. If there are any issues or questions regarding the NEMO Fitness to Dive Evaluation, the user must be examined by a physician to determine if the user is medically fit for diving.

#### **⚠WARNING**

**All Users must complete the NEMO Fitness to Dive Evaluation prior to using NEMO. Use of NEMO without completion of the NEMO Fitness to Dive Evaluation may result in serious injury or death.**

#### 3.3.2 NEMO Online Dive Training Course

All forms of diving have safety considerations and inherent risks. This Owner's - Users Manual does not address all diving-related risks. Some, but not all, dangers and risks related to the usage of NEMO will be outlined throughout this document.

Proper diving safety instruction must be acquired in the online training course and through professional instruction. The complementary NEMO Online Dive Training Course provides instructions focused on diving technique and safety considerations; whereas this Owner's - Users Manual focuses on NEMO ownership, components, controls and care.

It is advised that your first dive be completed in a swimming pool or in a body of water with a WMO Sea State 0 to ensure that you thoroughly understand both this Owner's - Users Manual and the training course. During your first dive you'll also confirm your equipment is operating properly. It is advised to complete your first dive without additional variables such as waves and currents. If you are not comfortable after your first dive, you should seek professional guidance.

#### **⚠WARNING**

**All Users must successfully complete the NEMO Online Dive Training Course prior to using NEMO. Use of NEMO without completion of the training course may result in serious injury or death.**

## 4 Specifications

Battery Run Time	Approximately 60 minutes*
Maximum Dive Depth	10 feet / 3 meters
Intended Sea States	WMO Sea State Code 0, 1, 2
Total Weight	10.3 lb / 4.7 kg
Maximum Dimensions (Everything installed)	22 x 18 x 22.25 in. / 55.9 x 45.8 x 56.5 cm
Main Body Dimensions	11 x 7.75 x 6.5 in. / 28.0 x 19.7 x 16.5 cm
Air Flow Rate	1.8 CFM @ 4.5 PSI 3.0 CFM @ 2.25 PSI
Battery Type	Lithium Ion
Battery Voltage	14.4 V
Battery Capacity	72 Wh
Battery Charge Time	3 hours
Battery Charger Input Voltage	100-240 VAC, 50/60 Hz
Compressor Type	Oil-less Brush-less DC Diaphragm Pump
Heat Management	Water-cooled (must be in water while running)
Safety Protection	Over-current, Over-temperature, Under-voltage, Reverse Air Flow
User Feedback	Battery Level Gauge, Low Battery Behavior
Dive Flag Options	Red-and-White, Alpha
Gas Type	Air
Electromagnetic Compatibility Compliance	FCC 47 CFR Part 15B:2017 ISED ICES-003: Issue 06 (2016) EN 55032:2015 EN 55024:2010/A1:2015
Year of Manufacture	2019

\*Battery life time is dependent on the user. This value should be used for reference only.

## 5 CE Certifications

### NEMO

NEMO conforms with the relevant Community harmonization legislation:

- Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC
- Directive 2014/30/EU of 26 February 2014 on the harmonization of the laws of the Member States relating to electromagnetic compatibility
- Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
- Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) (in short referred to as “the WEEE Directive” or “2012/19/EU”)

References to the relevant harmonized standards used or references to the specifications in relation to which conformity is declared:

- EN1012-1:2010
- EN55032:2015
- EN55024:2010

### NEMO Battery

#### Battery

- EN 61000-6-3:2007 + A1:2011+AC:2012 - Radiated Emission
- EN 61000-4-2:2009 - Electrostatic Discharge (ESD)
- EN 61000-4-3:2006+A1:2008+A2:2010 - Radio-frequency Electromagnetic Field Amplitude Modulated (RS)

#### Battery Charger

Tested according to:

- EN 55014-1:2006/A2:2011
- EN 55014-2:2015
- EN 55014-2: 1997/A2:2008
- EN 61000-3-2:2014



## 6 Un-packaging Your NEMO

### 6.1 Packaging Notes

#### 6.1.1 Keep Original Packaging

It is advised to keep the original packaging in case re-packaging is required. If the packaging is not kept by the user and re-packaging is required, it is advised that NEMO be packed tightly within the package so that it cannot move around within the box. A heavy-duty box shall be used. If the Battery is to be included, comply with all applicable regulations for transportation of lithium battery packs as required by your courier within your region.

#### 6.1.2 Recycling

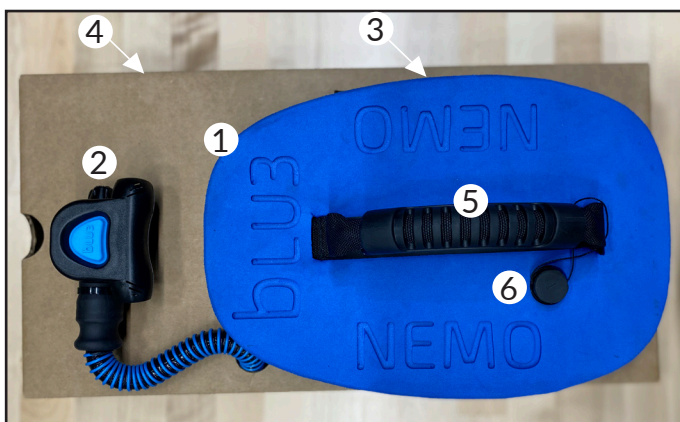
BLU3 uses recyclable materials and minimizes the use of single-use plastics. If you do not plan to re-use your packaging, please recycle appropriately. All cardboard pieces of the NEMO packaging box may be recycled.

### 6.2 Package Contents

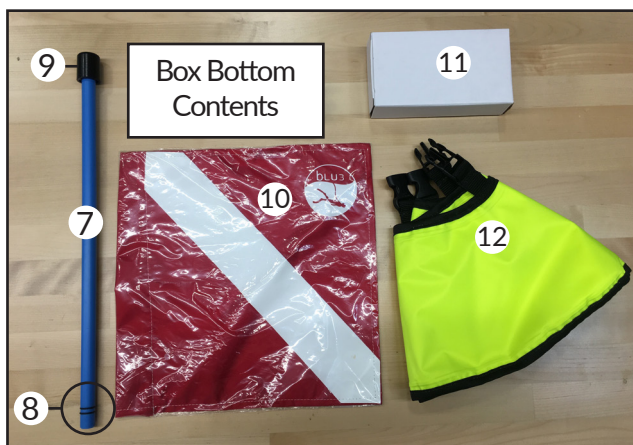
#### NOTICE

Confirm all the contents are present in your box. If any contents are missing or damaged, stop and contact BLU3 before proceeding.

The following items should be present inside of the shipping box.



- 1 NEMO
- 2 Smart Reg™
- 3 Battery
- 4 Dive Harness (inside)
- 5 NEMO Handle
- 6 Intake Plug



- 7 Snorkel Tube
- 8 Snorkel Tube O-rings
- 9 Drip Cap
- 10 Dive Flag
- 11 Battery Charger
- 12 Flotation Tube



If applicable, confirm accessories are present. Accessories may include:

- White or Black NEMO Backpack
- Spare Battery and Battery Charger

*Note:* If you ordered more than one spare Battery, the other Battery or Batteries will be delivered in a separate package.



1. Remove the NEMO Main Body, Air Hose, and Smart Reg™ from the shipping insert.
2. Confirm the Battery is installed in the Battery Compartment.
3. Confirm the Warning Label is present on the Handle.

## **⚠ WARNING**

Never remove the Warning Label from NEMO. Removal of the Warning Label may result in unqualified or untrained user(s) operating NEMO, which may lead to serious injury or death.



**WARNING**  
READ OWNER'S MANUAL TO PREVENT SERIOUS INJURY  
3001 NW 25th Ave., Pompano Beach, FL 33069  
BLU3, INC. [diveblu3.com](http://diveblu3.com)



4. Confirm the Harness Attachment Point is installed on the Air Hose.

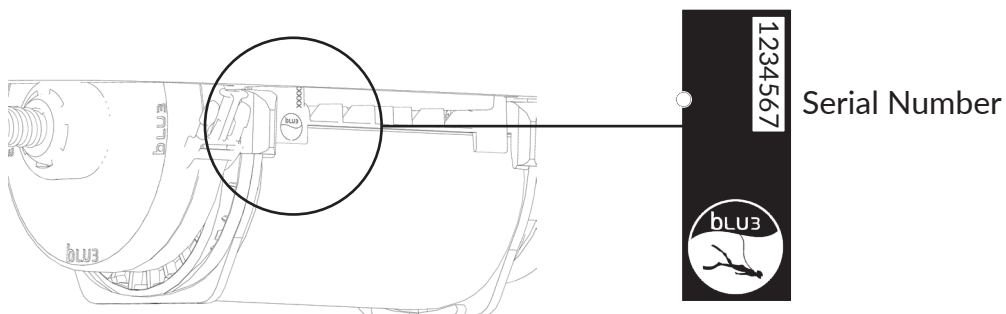


5. Remove the Mouthpiece Cover from the inside of the shipping insert.
6. Remove the Battery from the NEMO Battery Compartment by sliding it out.
7. All components should now be removed and separated.

### 6.3 Product Registration

Registering your NEMO with BLU3 enables us to contact you about service requirements, upgrades and other important information. Follow these instructions to register your NEMO with BLU3:

1. The Serial Number is located above the white logo on the side of NEMO.
2. Locate the Serial Number as shown in the photo below. You can find it by first looking where the Air Hose exits, then looking to the right of that for the white BLU3 logo.
3. Note the Serial Number.
4. Complete the NEMO Online Dive Training Course. Note the confirmation code at the end of the course.
5. Go to [diveblu3.com/support](http://diveblu3.com/support) and click on Product Registration.
6. Fill out the form with your Serial Number, course confirmation code and other information.



## 7 Preparing for Your First Startup

### **⚠ WARNING**

The Battery and Battery Charger show manufacturer's warnings that must be read and understood by the user. Failure to comply with the Battery and Battery Charger warnings could lead to serious injury or death.

#### 7.1 Battery and Battery Charger Warnings:

- Do not touch contacts together.
- Do not disassemble or modify the Battery.
- Do not put the Battery in a damp place when not connected to NEMO.
- Assure connector is tight with O-ring in place before use.
- Battery pack is only waterproof with mating connector connected.
- Store in a cool, dry place.
- Use only with approved charger.
- Maximum depth rating: IP67 / 1 meter.
- Do not use or charge under high temperature.
- The battery pack should be charged at least once every 3 months during non-use.
- Do not allow the battery to be near flammable sources.
- Do not store at temperatures above 140 degrees Fahrenheit/40 degrees Celsius.
- Do not store at temperatures below -4 degrees Fahrenheit/-20 degrees Celsius.
- Never leave batteries unattended while charging.

#### 7.2 Charging the Battery

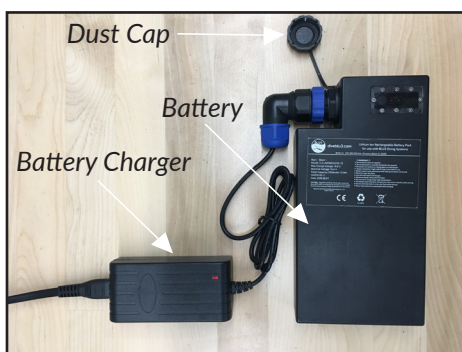
The Battery can be charged from zero to 100 percent capacity in about 3 hours. The Battery has a Dust Cap attached to the connector. The Dust Cap should be installed by screwing it onto the connector whenever the Battery is not connected to NEMO's waterproof Power Connector. The Dust Cap does not create a watertight seal and the Battery should never be placed underwater unless it is properly connected to NEMO's Power Connector.

### **⚠ WARNING**

Rechargeable batteries have an inherent risk of fire and explosion. Do NOT leave unattended while charging.

Follow these instructions to charge your Battery properly:

1. Locate your NEMO Battery.
2. Locate your NEMO Battery Charger.
3. Unscrew the Dust Cap of the Battery.
4. Plug the Battery Charger into a wall outlet.
5. Attach the Battery Charger connector to the Battery.
6. Confirm the Battery is being charged (LED is red.)
7. Monitor the Battery and Battery Charger until the LED turns green.



*Battery with Battery Charger connected*



*Battery and NEMO Power Connector*

## **⚠ DANGER**

Do NOT leave the Battery Charger and Battery unattended while charging. Failure to monitor the Battery Charger and Battery while charging may result in fires or explosions, possibly resulting in serious injury or death. In case of fires, contact your local emergency departments.

8. Unplug the Battery Charger from the wall outlet.
9. Disconnect the Battery Charger connector from the Battery connector.
10. Screw the Dust Cap onto the Battery Connector.

## **NOTICE**

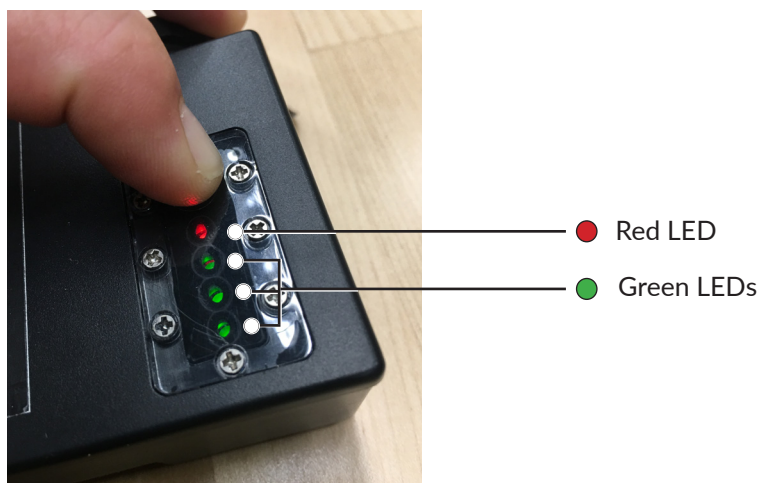
Confirm the Battery's Dust Cap is clean and dry prior to connecting it to the Battery connector. Installing the Dust Cap with water inside of it could lead to corrosion of the terminals on the Battery.

11. Store the Battery and Battery Charger in a cool, dry place until you are ready to dive.

### 7.3 Checking the Battery Capacity

The Battery has an LED gauge used to estimate the remaining charge in the Battery. Follow these instructions to interpret the capacity remaining in the Battery:

1. Remove the Battery from all connected devices.
2. Locate the Battery's LED gauge.
3. Press the button on the LED gauge.
4. Observe the color and number of LED's that light up.
5. See the Battery Capacity Chart below.



Red LED	# of Green LEDs	Battery Capacity
ON	3	76-100 %
ON	2	51-75%
ON	1	26-50 %
ON	0	1-25 %
OFF	0	0 %

**Figure 7.3: Battery Capacity Chart**



#### 7.4 Installing the Dive Flag

The Dive Flag is used to indicate that a diver is present in the water. Prior to diving, the user must review local dive flag laws to decide which diver-down flag to display. Depending on the location, either the Alpha Dive Flag (blue-and-white) or the Red-and-White Dive Flag must be installed onto the Snorkel Tube.

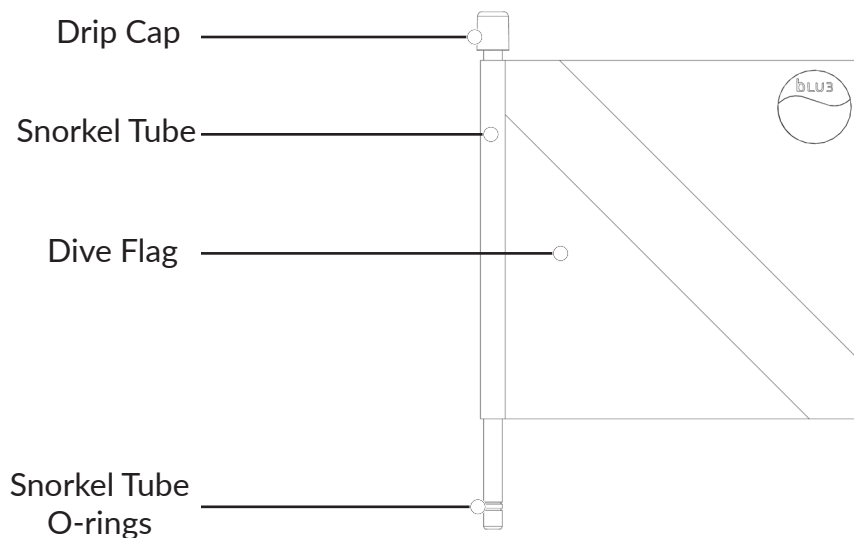
#### **⚠ WARNING**

**Always use the proper Dive Flag while diving. Absence or improper use of a “diver down” Dive Flag will increase risk of being struck by watercraft, which could result in serious injury or death.**

Follow these instructions to install the Dive Flag:

1. Remove the Drip Cap from the Snorkel Tube.
2. Decide which Dive Flag is appropriate for your dive location.
3. If the wrong Dive Flag is on the Snorkel Tube, remove it by pulling the bottom of the Snorkel Tube out from the black elastic at the bottom of the Dive Flag.
4. Install the correct Dive Flag by inserting the top of the Snorkel Tube into the black elastic at the bottom of the Dive Flag.
5. Slide the Snorkel Tube through the elastic until the Snorkel Tube extends out of the top of the Dive Flag by about 1.25 inches.
6. Replace the Drip Cap by pressing it down on top of the Snorkel Tube.

**Snorkel Tube Diagram**





## 7.5 Adjusting the Harness Attachment Point

The Harness Attachment Point is installed on the Air Hose near the Smart Reg™ and is adjustable so that the user can modify the length of hose between the Harness Attachment Point and the Smart Reg™. It is important the proper length be set so the user has no restrictions of head movement while diving. The proper length will change based on each user.

Follow these instructions to adjust the Harness Attachment Point:

1. Hold the Smart Reg™ Mouthpiece in your mouth with your left hand.
2. Hold the Air Hose with your right hand and place it on the back of your neck.
3. Rotate your head in all directions.
4. Observe the length of the Air Hose and check for tension or excess hose length.
5. Adjust your right hand until the hose length is the proper length. It should be long enough to not cause any tension, and short enough to not bunch up.
6. Keep your right hand in place on the Air Hose.
7. Gently place the Air Hose on a flat surface free of sharp objects.
8. Keep note of where your right hand was placed on the Air Hose.
9. Gently rotate the Harness Attachment Point until it is located in the spot that your right hand was holding the Air Hose on your neck.

### NOTICE

Rotate the Harness Attachment Point to increase or decrease the Air Hose length to the Smart Reg™.



### ⚠ WARNING

Always check and adjust the Harness Attachment Point prior to diving. If the Air Hose length is too short for the user, the Smart Reg™ could be pulled from the user's mouth while diving, leading to an out-of-air situation.

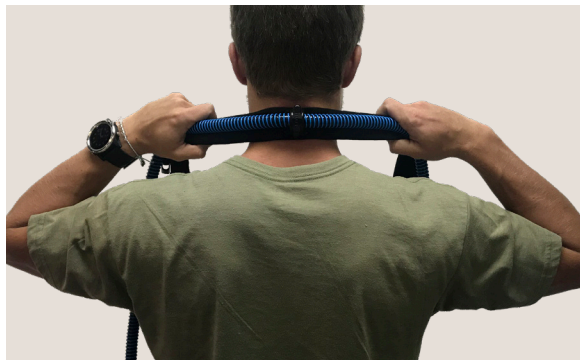
## 7.6 Donning the Dive Harness

It is important to properly adjust the Dive Harness prior to diving. The Dive Harness prevents tension from being placed on the Smart Reg™ Mouthpiece. Follow these instructions to attach the Dive Harness to your body:

1. Confirm the Dive Harness is properly attached to the Harness Attachment Point.
2. Hold the large male buckle and pull its D-ring to loosen it up as much as possible.
3. Hold the Dive Harness out in front of your chest with your right hand on one side of the Harness Attachment Point and your left hand on the opposite side of the Harness Attachment Point.
4. Adjust the orientation of your hands such that your right hand is on the same side as the Smart Reg™ and your left hand is on the opposite side.



5. Lift the Dive Harness above and then behind your head.
6. Place the Harness Attachment Point on the back of your neck.
7. PHOTO: Harness Attachment Point on back of neck with hands on each side.
8. Allow the Smart Reg™ to hang down over the front of your right shoulder.



9. Allow the right side of the Dive Harness to hang down over the front of your right shoulder.
10. Allow the left side of the Dive Harness to hang down over the front of your left shoulder.





11. Using your right hand, take the large male buckle and strap around the back of your body.



12. Grab the large male buckle with your left hand and release it from your right hand.
13. Place your right hand on the large female buckle.
14. Using your left hand, bring the male buckle up to mate with the large female buckle.



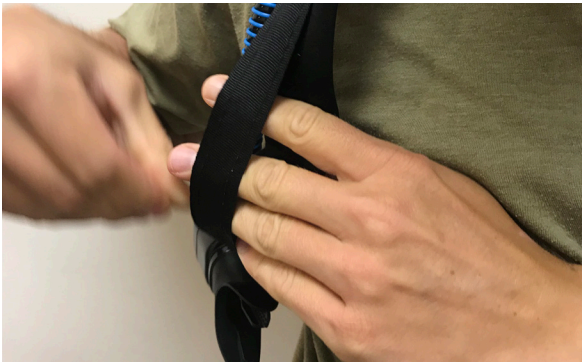
15. Hold the large male buckle with your right hand and pull its D-ring with your left hand until the Dive Harness is snug on your body, but not to the point that it pulls back on your shoulders.



16. Confirm the Harness Attachment Point is centered on the back of your neck.
17. Locate the small female buckle on the right side of your chest.
18. Locate the small male buckle on the left side of your chest.
19. Clip the two small buckles together. The chest strap should be horizontal across your chest.



20. If the chest strap is not horizontal and it is on an angle with respect to the ground, use the hook-and-loop on the right side of your chest strap to adjust the height of the small female buckle. Lift the top fabric up, move the female buckle up or down, then press the fabric back down until it is secure.



*Lifting up on hook-and-loop*



*Adjust height buckle*



*Pressing down on hook-and-loop*



21. Confirm the chest strap is now horizontal. If not, repeat step 20 until it is horizontal with respect to the ground.



*Chest strap horizontal across chest  
(CORRECT POSITION)*

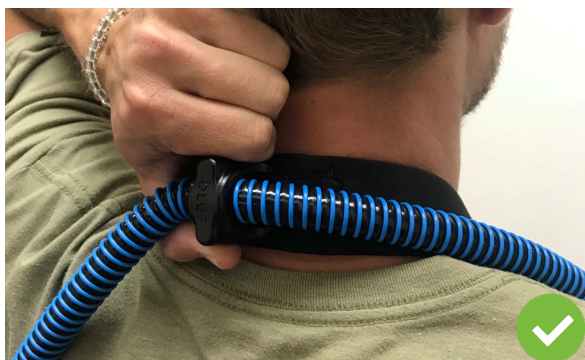


*Chest strap angled across chest  
(INCORRECT POSITION)*

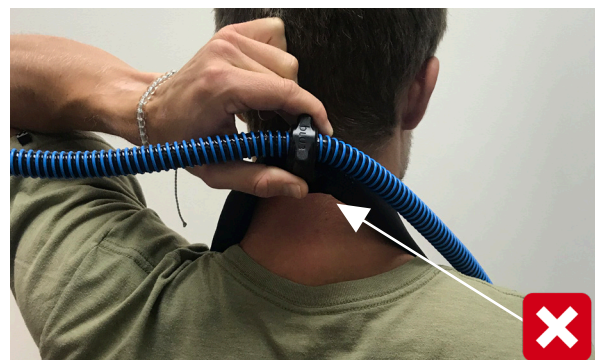
22. Pull the small D-ring on the male buckle of the chest strap until the Dive Harness feels secure against your body.



*Pulling D-ring to tighten chest strap*



*Maximum distance Harness Attachment Point  
should lift off of neck*



*INCORRECT distance of Harness Attachment Point  
lifting off of neck*

23. Always be prepared to remove the Dive Harness in case of entanglement. For instructions on removing the Dive Harness, refer to **Section 9.2 on Page 35** and refer to the NEMO Online Dive Training Course.



## 8 Startup Instructions

### **⚠ WARNING**

Confirm the user has successfully completed the NEMO Online Dive Training Course. Use of NEMO without completion of the training course may result in serious injury or death.

### **⚠ WARNING**

Confirm the user has completed the NEMO Fitness to Dive Evaluation and is medically fit to dive. Use of NEMO without full compliance with the NEMO Fitness to Dive Evaluation may result in serious injury or death.

### **⚠ WARNING**

Confirm the user has read and understands this Owner's - Users Manual in its entirety. Use of NEMO without full understanding of this Owner's - Users Manual may result in serious injury or death.

### **⚠ WARNING**

Using NEMO outside of its intended use as described in Section 3.2 on Page 9 can allow water to enter the breathing air supply and may lead to an out-of-air situation. Prior to diving, always confirm that the weather and conditions are suitable for using NEMO.

### **⚠ WARNING**

Damage to the Battery case may allow water to leak into the battery which may result in system damage, fire, burns, and out-of-air hazards. Do NOT use a Battery with an outer case that has been damaged or shows signs of damage.

### **⚠ WARNING**

Failing to complete the Component Inspection Checklist (Table 8.1.1 below) may result in system failure during the dive and result in an out-of-air situation or water entering the breathing air supply. Always complete the Component Checklist prior to diving with NEMO. If a problem exists, do not dive NEMO until it has been resolved. Failure to comply with these instructions may result in serious injury or death.

### **⚠ WARNING**

NEMO must be operated while in water for cooling purposes. Allowing NEMO to run out of water for periods of time longer than approximately twenty seconds will result in overheating and may cause permanent damage, reduced air flow to the diver, contaminated air, and out-of-air hazards.

## 8.1 Component Inspection

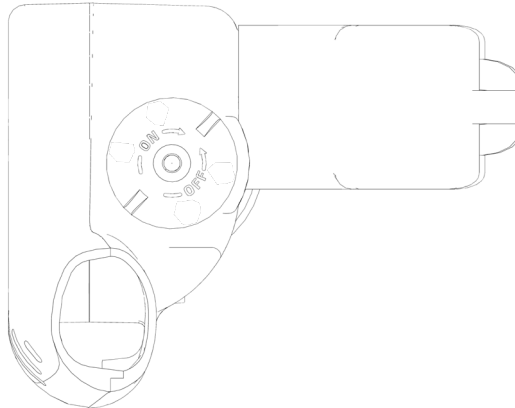
1. Carefully unpack and gently set all components on a flat surface.
2. Inspect all components to ensure parts are in place, firmly attached, and free of damage.

**Component Inspection Checklist**

<b>Power Cable O-ring</b>	<ul style="list-style-type: none"><li>• Confirm the orange O-ring inside the NEMO power cable connector is present and fully intact without damages.</li></ul>
<b>Battery</b>	<ul style="list-style-type: none"><li>• Confirm the outer edges are fully sealed, no gaps.</li><li>• Confirm there is no damage or cracks.</li><li>• Confirm the LED gauge lights up and the amount of charge is understood by the user.</li></ul>
<b>Snorkel Tube O-rings</b>	<ul style="list-style-type: none"><li>• Confirm both O-rings are present.</li><li>• Confirm the O-rings are fully seated in their grooves.</li><li>• Check for scratches, nicks, tears, sand, dirt and clean or replace as necessary.</li></ul>
<b>Dive Flag</b>	<ul style="list-style-type: none"><li>• Confirm the appropriate Dive Flag is installed on the Snorkel Tube.</li></ul>
<b>Drip Cap</b>	<ul style="list-style-type: none"><li>• Confirm the Drip Cap is fully inserted onto the Snorkel Tube.</li></ul>
<b>Smart Reg™ Mouthpiece</b>	<ul style="list-style-type: none"><li>• Confirm there are no tears, holes, sand or dirt on the mouthpiece.</li><li>• Confirm the zip tie is in good condition and holds the Mouthpiece securely on the Smart Reg™.</li></ul>
<b>Smart Reg™ Hose Cuff</b>	<ul style="list-style-type: none"><li>• Confirm there are no tears or holes in the cuff.</li><li>• Confirm the zip tie is in good condition and holds the cuff securely in place.</li></ul>
<b>Smart Reg™ Purge Button</b>	<ul style="list-style-type: none"><li>• Confirm there are no tears or holes in the silicone face of the Purge Button.</li><li>• Confirm there is no buckling, folding, or gaps between the Purge Button and the Smart Reg™ housing.</li></ul>
<b>Air Hose</b>	<ul style="list-style-type: none"><li>• Confirm there are no punctures, holes, kinks or binds in the hose.</li></ul>
<b>Harness Attachment Point</b>	<ul style="list-style-type: none"><li>• Confirm the Harness Attachment Point is properly attached and not damaged.</li><li>• Confirm the Dive Harness buckles, attachments and webbing are all in good condition.</li></ul>

**Table 8.1.1 : Component Inspection Checklist**

3. Ensure the Smart Reg™ Knob is rotated to the OFF position. The knob is in the OFF position when it is rotated counterclockwise until it stops.



*Knob in OFF position*

4. Ensure the Battery is sufficiently charged.

## NOTICE

It is advised to always begin a dive with a fully charged Battery.

5. Inspect the gold-colored electrical contacts to ensure there is no physical damage or corrosion. There are two contacts on the Power Cable and two on the Battery Connector.

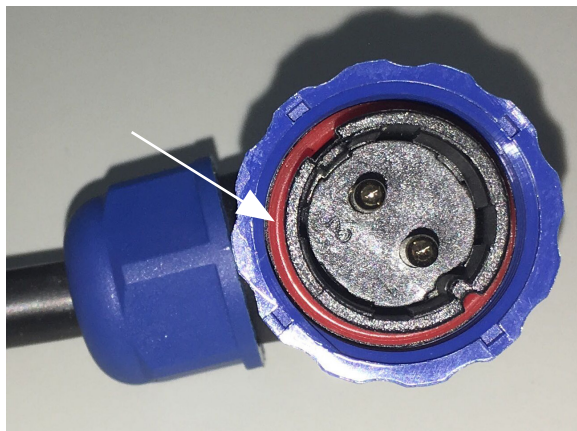
## WARNING

Damage or corrosion to the electrical contacts may reduce system performance and result in insufficient air flow and lead out-of-air hazards. Do not operate NEMO if corrosion exists on any of the electrical contacts. Refer to Section 13.3 on Page 45 for instructions on cleaning electrical contacts.

6. Inspect the Power Cable Connector to ensure that the orange O-ring is present, fully seated and without damages or dirt. It is advisable to always have a set of spare O-rings.

## WARNING

Damage or absence of the Power Cable O-ring can allow water to touch the battery contacts, which may result in a failure of the Battery and result in out-of-air hazards. Do not operate NEMO if the O-ring is absent, dirty or damaged.



*Power Cable O-ring in the Power Cable Connector  
To order a replacement O-ring, [diveblu3.com/support](http://diveblu3.com/support)*

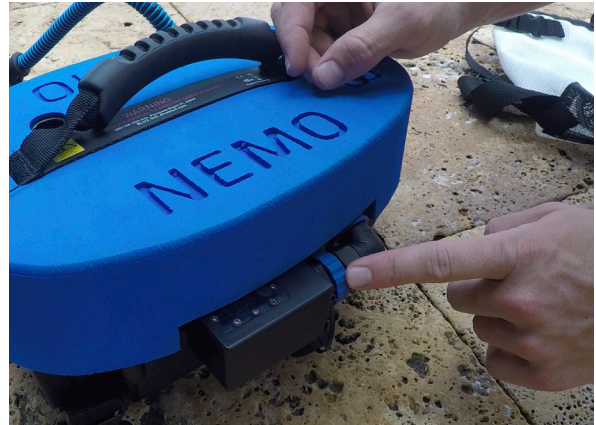


## 8.2 Powering Up

7. Partially install the Battery into the Battery Compartment, until the Power Cable aligns with the Battery Connector.
8. Attach the Power Cable to the Battery Connector and prepare to listen for audible beeps.



*Inserting Battery into the Battery Compartment (No. 7)*



*Power cable connector connected to Battery (No. 8)*

9. Count any audible beeps that are prior to the musical startup tone.
10. If there are more beeps than the musical startup tone, refer to **Section 14.1 on Page 48** for information on the meaning of audible beeps.
11. Thread the connectors together until the connector is fully tightened as shown below.

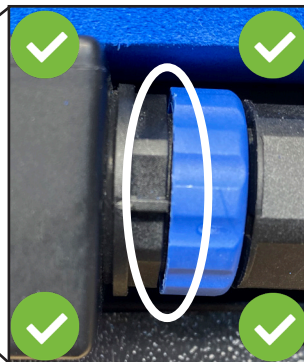
### **WARNING**

A partially tightened battery connector can allow water to touch the battery contacts. This may result in a failure of the Battery and result in an out-of-air situation. Always confirm the Power Cable connector is fully tightened onto the Battery Connector prior to the use of NEMO.

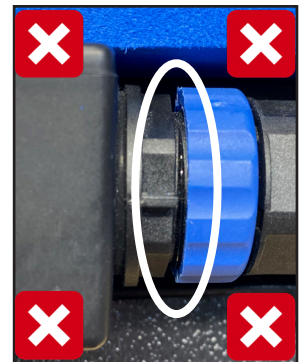
12. Insert the Battery into the Battery Compartment. The edge of the Battery should be lined up with the edge of the blue Flotation Foam.



*Fully threaded connectors with battery inserted completely*



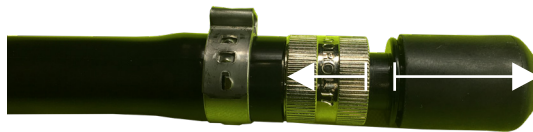
*Threaded connector (CORRECT)*



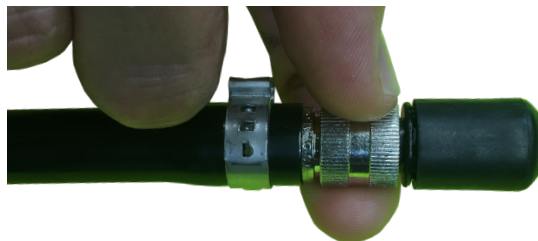
*Threaded connector (INCORRECT)*

### 8.3 Installing the NEMO Flotation Tube

12. Inflate the NEMO Flotation Tube by following these instructions:
  - i. Unlock the Oral Inflation Valve by rotating the threaded nut.
  - ii. Press in on the Oral Inflation Valve to open the valve.
  - iii. Take a moderately deep breath.
  - iv. Press your mouth against the Oral Inflation Valve.
  - v. Exhale into the Oral Inflation Valve.
  - vi. Stop pressing the Oral Inflation Valve to allow the valve to close.
  - vii. Repeat steps 2-6 until the Flotation Tube is fully inflated.
  - viii. Lock the Oral Inflation Valve by rotating the threaded nut.



*Unlocked valve*



*Locking the valve*



*Locked valve*



13. Attach the Flotation Tube to NEMO by following these instructions:
- (1) Remove the Snorkel Tube.
  - (2) Orient the Flotation Tube above the Flotation Foam such that the Oral Inflation Valve is underneath the Flotation Tube.
  - (3) Orient the Flotation Tube such that the Oral Inflation Valve is on the side opposite of the Battery.
  - (4) Allow the buckles of the Flotation Tube to hang below the Flotation Tube.
  - (5) Push the buckles through as you slide the inner ring of the Flotation Tube onto the Flotation Foam.
  - (6) Push the inner ring of the Flotation Tube down on the Flotation Foam by about  $\frac{3}{4}$  of an inch.
  - (7) The inner ring of the Flotation Tube should now be tight around the outside of the Flotation Foam and the buckles should not be visible from the top side of the Flotation Tube.
  - (8) Lean NEMO partially to one side as you clip each of the four buckles of the Flotation Tube to the buckles on the NEMO Main Body.
  - (9) Confirm the Flotation Tube is fully secured by lifting up on the Flotation Tube and observing that it does not detach from the Flotation Foam.

## **WARNING**

Incorrect installation of the Flotation Tube will result in decreased or unbalanced buoyancy, which may result in capsizing of NEMO. This can cause water intrusion to occur and could lead to an out-of-air situation. Always confirm proper installation of the Flotation Tube prior to diving.

## **NOTICE**

The Flotation Tube must be attached from the top of NEMO. Do NOT attempt to attach the Flotation Tube from the bottom.



*Push buckles through to the bottom of Flotation Tube*



*Press the rear of the Flotation Tube over the Foam*



*Press the front of the Flotation Tube over the Foam*



*Situate the Flotation Tube about 3/4" down on the Foam*



*Locate each of the 4 female and male buckles*



*Connect all 4 buckles to secure the Flotation Tube*

#### 8.4 Installing the Snorkel Tube

14. Check local diving regulations and confirm that the proper Dive Flag is installed onto the Snorkel Tube.  
If you do not have the proper Dive Flag, you will need to order one from BLU3 at [diveblu3.com/support](http://diveblu3.com/support).

### **⚠ WARNING**

Absence or improper use of a “diver down” Dive Flag will increase risk of being struck by watercraft, which could result in serious injury or death.

Refer to **Section 7.4 on Page 18** for instructions on installing or replacing your Dive Flag.

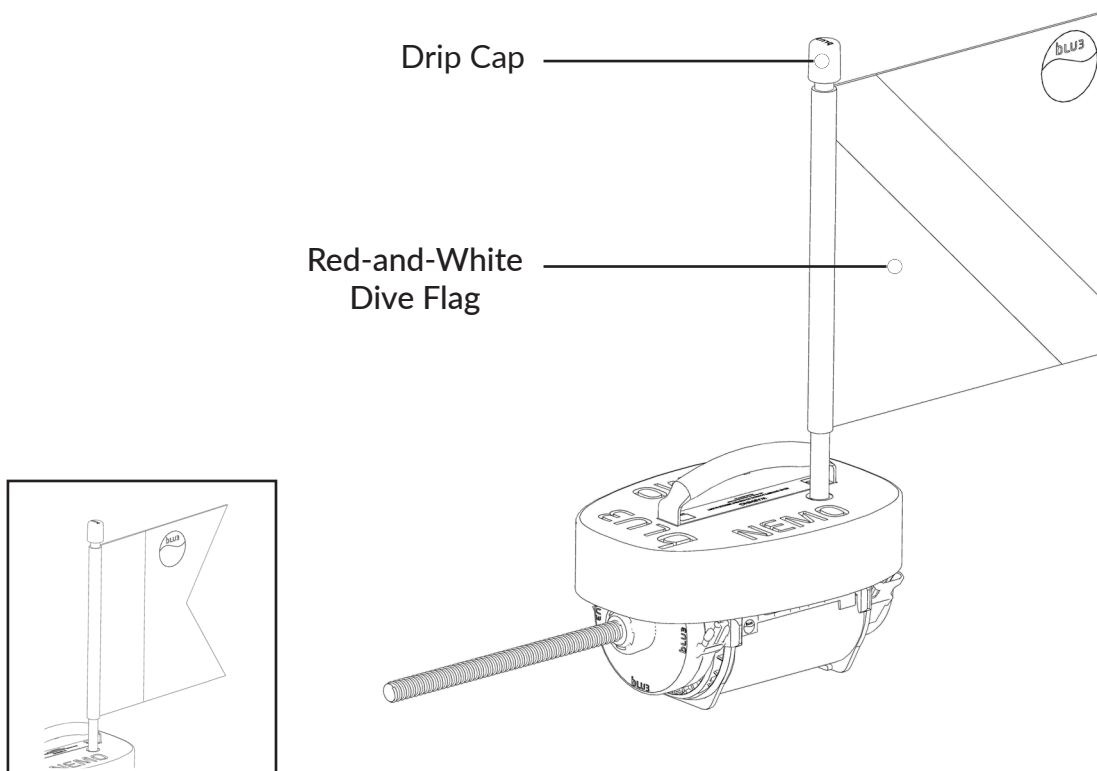
15. Install the Snorkel Tube by gently pressing the double O-ring end into the NEMO Intake orifice such that both O-rings are fully inside the Intake (about one inch below the surface.) Be sure the O-rings remain in their grooves when inserted; remove and repeat if the o-rings are dislodged from their grooves during insertion.

### **⚠ WARNING**

Damage to the Snorkel Tube O-rings or Drip Cap can result in decreased system performance and water intrusion to the air supply, causing out-of-air hazards. Do not operate NEMO before confirming the Snorkel Tube is properly assembled and installed.

16. Confirm the Drip Cap is pressed down fully on top of the Snorkel Tube to prevent foreign debris and water from entering the air intake.

#### Dive Flag Diagram



\*Alpha Dive Flag

## 8.5 Gearing Up

17. Locate your dive gear including, but not limited to, dive mask and dive fins. Keep it within arms reach.
18. Confirm the Dive Harness is properly installed onto the Hose Attachment Point and properly attach the Dive Harness to the user's body.

### **⚠ WARNING**

Improper installation of the Dive Harness may result in increased tension on the Smart Reg™ mouthpiece and pull the mouthpiece out of the user's mouth, resulting in out-of-air hazards. Always confirm the Dive Harness is properly installed and attached to the user before operating NEMO. For instructions on proper assembly and donning of the Dive Harness, refer to Section 7.6 on Page 21.

### **⚠ WARNING**

Always place NEMO in the water while diving. NEVER allow NEMO to run for extended periods outside of water as this will cause overheating and may cause permanent damage, reduced air flow to the diver, contaminated air, and out-of-air hazards. Always leave NEMO in the OFF position or with the battery disconnected when not in use and during transport.

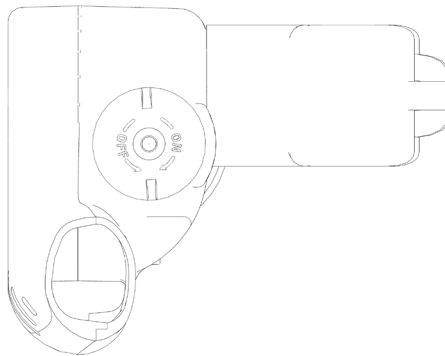
## 8.6 Pre-Dive Check

19. Turn the Smart Reg™ Knob to the ON position by gently rotating it clockwise until you feel it stop.

### **⚠ WARNING**

Partial rotation of the knob into the ON position will result in reduced or intermittent air flow, which may lead to out-of-air hazards. Ensure the knob is fully rotated to the clockwise direction prior to diving and do not adjust the knob while diving.

Confirm that the knob is fully rotated to the ON position by confirming that the finger grooves on the knob are pointing up and down.



**Figure 8.6.1**

*Shows knob in full ON position*



20. Air should not be free-flowing from the Smart Reg™ when the ON/OFF Knob is in the ON position unless the Purge Button is pressed. If air is free-flowing, refer to **Section 13.6 on Page 46**.
21. Press the Purge Button to confirm NEMO is on and functioning properly and to confirm water does not come out of the Mouthpiece or exhaust vents. Air should flow out of the mouthpiece when the user presses the Purge Button. If water is coming out of the Smart Reg™, refer to **Section 13.4 on Page 45** for instructions on clearing NEMO of water. If air is not flowing, refer to **Section 14.5 on Page 51**.

**Do NOT operate NEMO for more than 20 seconds while out of the water.**

22. Place your lips over the outside of the Mouthpiece.
23. Exhale and cautiously inhale from the Smart Reg™ to confirm that NEMO is functioning properly. Air should flow from the mouthpiece into the user's mouth upon gentle inhalation. If air is not flowing, refer to **Section 14.5 on Page 51**. Air should easily vent out of the Smart Reg™ upon exhalation.
24. Return the Smart Reg™ knob to the OFF position until the user is ready to dive.

## NOTICE

Keeping the knob in the OFF position while NEMO is powered on but not diving will save power and protect from unnecessary pumping.

25. Use the Startup Checklist in **Table 8.6.2 below** to confirm that each Pre-Dive Check has been completed and the unit is functioning properly.

**Startup Checklist**

System Inspection: components intact, in-place, un-damaged and functional
Smart Reg™ Knob set to OFF
Battery level is fully, or at least sufficiently, charged
Battery is installed and connector is tight/waterproof Startup tone, Smart Reg™ Knob ON, NEMO is pumping & air flows on inhalation
Smart Reg™ Knob OFF until ready to dive
Flotation Tube inflated properly attached to NEMO
Dive Flag, Drip Cap, O-rings and Snorkel Tube properly attached
Diver Harness attached to Air Hose
Hose length between Smart Reg™ and Dive Harness properly adjusted
Dive Harness adjusted properly for diver and easy to remove quickly if necessary

**Table 8.6.2: Startup Checklist**

### 8.7 Beginning the Dive

26. Turn the Smart Reg™ Knob to the ON position.
27. Gently place NEMO into the water.

#### **⚠ WARNING**

Dropping or throwing NEMO into the water with hard impact may cause system failures that may lead to out-of-air hazards. Always place NEMO into the water gently with low impact.

28. Begin the dive and have fun, but be safe! Always follow the instructions in the NEMO Online Dive Training Program and this Owner's - Users Manual when diving.
29. Be prepared to make a controlled ascent to the surface at all times in case of an out-of-air situation.



## 9 Diving Considerations

Refer to this section only for guidance on the use of equipment. Do NOT refer to this section for diving technique or safety. Dive training shall be acquired from the NEMO Online Dive Training Course and professional instruction. Find the NEMO Online Dive Training Course at [diveblu3.teachable.com](https://diveblu3.teachable.com).

### **⚠ CAUTION**

Problems with pressure equalization in the middle ear are common in diving and may result in ear barotrauma. Severe barotrauma may require urgent care. If symptoms of dizziness or severe ear pain are experienced during or after diving, the diver should see a doctor immediately.

Refer to the NEMO Online Dive Training Course for information on how to equalize your ears while diving.

### 9.1 Air Hose Management

The Air Hose is designed to float and be flexible, anti-kinking, light weight and durable. The NEMO Air Hose must be handled with care.

### **⚠ WARNING**

Air Hose damage will result in reduced NEMO longevity and may result in water entering the pump, water in the air supply, reduced air supply, and out-of-air hazards. Take care to not alter or damage the Air Hose by excessive pulling, stretching, crushing, puncturing, melting, or other damage.

Do NOT hold or carry NEMO by the Air Hose, step-on, pinch, crush, puncture, melt, or degrade the Air Hose material. Take care when stowing or packing NEMO that the Air Hose is not bent sharper than the circumference of the NEMO foam.

### **⚠ WARNING**

NEMO's Air Hose can cause entanglements and tripping hazards. When walking or swimming with NEMO, ensure the Air Hose is handled in a manner to avoid damage and hazards.

Take care when carrying NEMO that the Air Hose doesn't drag/abrade against the ground or snag on obstacles. Depending on the user's height, excess Air Hose may need to be held up away from the ground until water entry. Remove tangles, knots, and kinks when preparing to dive with NEMO so that the Air Hose drapes in a smoothly curving, gently draped path from NEMO to the dive harness.

### **⚠ DANGER**

Underwater entanglement when out-of-air, such as after battery depletion, will result in drowning. Remain mindful of entanglement hazards and Air Hose location in consideration of the particular conditions at the dive site. Ensure practice and proficiency in removing the Dive Harness so that the diver can remove the harness and conduct a controlled-ascent, open airway, free swim to the surface in the event of an emergency.

While diving be cognizant of the Air Hose location; especially where the Air Hose may be prone to snagging or wrapping around other NEMOs at the surface.



## 9.2 Removing the Dive Harness

The user must always be prepared to completely remove the Dive Harness. In case of underwater entanglement, the user may be required to remove the Dive Harness rather than attempt to free the Dive Harness or Air Hose from an entanglement. Another situation in which the user may need to quickly remove the Dive Harness is if a boat snags the Air Hose and pulls NEMO and the diver.

Prior to your first dive, practice the following instructions until you have proficiency in removing the Dive Harness and always be prepared to remove the Dive Harness while diving. Refer to the NEMO Online Dive Training Course for further instructions on how to remove the Dive Harness.

1. Using your right hand, locate the small buckles on the Chest Strap.
2. Unclip the buckles of the Chest Strap immediately upon locating the buckle with your right hand by pressing in on the prongs of the male buckle.



*Unclipping the Chest Strap using right hand*

3. Using your left hand, locate the mated large buckles of the Dive Harness near the left shoulder.
4. Unclip the buckles of the Dive Harness immediately upon locating the buckle with your left hand by pressing in on the prongs of the male buckle.



*Unclipping the large buckle using left hand*

5. Push excess lengths of the Dive Harness away from your body and remove all potential entanglements with your body.
6. Make a safe ascent to the surface using the emergency diving techniques taught in the NEMO Online Dive Training Course.



## 9.3 Battery Life

### 9.3.1. Battery Charge Planning

#### **! DANGER**

Remaining underwater until the battery is fully depleted will result in out-of-air hazards. Always plan the dive based on knowledge of battery state of charge and dive time endurance based on the conditions to conclude the dive with spare battery charge remaining. Always remain close enough to the surface that you can perform a controlled-ascent, open-airway, free swim to the surface in case of an emergency.

NEMO's fully charged battery will provide for about an hour of underwater breathing time, and will result in an out-of-air hazard if the battery becomes fully depleted during the dive. Actual dive time will vary depending on individual air consumption, operating depth, and age of the battery. Always end your dive before the Battery becomes fully depleted.

Follow these instructions to plan your dive properly:

1. Check your Battery capacity (amount of charge.) Refer to **Section 7.3 on Page 17** for instructions on how to read your battery life.
2. Estimate your approximate dive time based on the Battery charge.

#### **NOTICE**

Dive time is based on many variables such as Battery charge and is not always the same from user to user, or from use to use.

3. Note the time that your dive begins.
4. Calculate the time that you expect your Battery to be fully depleted.
5. Plan a time to end your dive with plenty of extra time to make it back in case of a miscalculation, change in conditions, physical injury or other.
6. Monitor your dive time throughout the dive.
7. Conclude the dive at the planned time from step 5 with plenty of extra time to swim to the ending location.
8. Upon reaching the ending location, begin Shutdown. Refer to **Section 10 on Page 41** for Shutdown Instructions.

### 9.3.2. Low Battery Warning for the Diver

As NEMO's Battery gets closer to being fully depleted, NEMO will begin to pump less air at depth. The diver will feel less air flow when the Battery is about to die. This is a signal that the diver should begin to slowly ascend to the surface and end the dive. Be cognizant of this low battery warning while diving so that you can make a controlled ascent to the surface prior to NEMO shutting off.



## 9.4 Smart Reg™ Operation

### 9.4.1. ON/OFF Knob

The Smart Reg™ knob has two hard-stops for OFF and ON positions. OFF mode is actually a sleep/standby mode. A fully charged battery would be half depleted in about a year if left connected to NEMO with the knob set to OFF. Therefore, always disconnect the battery for long-term storage.

With the Smart Reg™ knob set to ON, NEMO is constantly powering and checking its sensors waiting to detect breathing or pumping commands and control the pump motor. With the battery connected and the knob set to ON, a fully charged battery would be half depleted in about two days even if NEMO is not pumping.

### **⚠ WARNING**

With NEMO powered on and Smart Reg™ knob set to ON, certain conditions such as shocks and vibrations can cause the pump to run unsupervised while out of water. Allowing NEMO to run for extended periods out of water will cause overheating and may cause permanent damage, resulting in reduced air output, contaminated air output, and out-of-air hazards. Always leave the knob in the OFF position during storage and transport and preferably with battery disconnected. Always place NEMO in the water while in use.

With the Smart Reg™ knob set to the ON position, NEMO is factory-set for an inhalation effort approximately equivalent to SCUBA regulators. The inhalation effort may be re-calibrated by qualified technicians if necessary, such as in the event of replacement of Smart Reg™ components, using the procedures in **Section 14.3 on Page 50**.

Because it is possible to stop air flow with the knob setting, we placed NEMO's ON/OFF knob at the location-of and within the control of the diver instead of at the surface.

### **⚠ WARNING**

Rotating the Smart Reg™ Knob into the OFF position while underwater will result stop air flow resulting in out-of-air hazards. The Knob must be rotated to the ON position before the diver attempts to breathe underwater.

### 9.4.2 Inhale or Exhale - **Do NOT hold your breath.**

NEMO's behaviors are controlled by software acting upon input from sensors in the Smart Reg™. In order for NEMO to function properly and for ultimate safety of the user, the user shall always maintain an open airway by either inhaling or exhaling. The diver shall never hold their breath.

### **⚠ DANGER**

Lung over-expansion injuries and deaths have occurred in SCUBA divers caused by inhaling compressed air at depth and then breath-holding while ascending. While NEMO's maximum depth is limited, NEMO divers are still breathing compressed air at depth which may lead to lung over-expansion if the diver does not exhale properly during ascent. Always breathe normally while diving and do NOT hold your breath while ascending. Refer to the NEMO Online Dive Training Course for further information and instruction.

### **NOTICE**

NEMO may pump sporadically if a user is holding their breath underwater; this can serve as a reminder to either inhale OR exhale, but to never hold your breath.



#### 9.4.3 Breathing Rhythm and Pump Speed

NEMO will pump more air when the user inhales deeper. With lighter inhales, the pump will run slower and pump less air to save energy. The pump will feel most smooth when the diver inhales deeply and the pump is running fast. When running slowly and conserving energy, the diver will be able to feel more vibration.

#### 9.4.4 Purge Button Operation and Regulator Clearing Process

When water enters the Smart Reg™, the diver has two options to remove the water. The first option is to exhale slowly and fully into the mouthpiece, which will force the water out of the exhaust ports. If this option does not clear the water or the diver is in a situation where this is not practical, the diver should use the Purge Button. By depressing the blue Purge Button located on the front of the Smart Reg™, the system will automatically vent air through the Smart Reg™, clearing the water out.

#### 9.4.5 Free-Flow Stop

Free-flow is when the pump runs continuously causing air to continuously vent through the Smart Reg™ whereas normal inhalation and exhalation does not cause free flow.. When NEMO detects that free-flow has occurred for more than about 20 seconds, it stops pumping. The purpose of this feature is to prevent overheating, Battery drain, and stop continuous free-flow. To reset after it stops pumping due to continuous free-flow, the user must turn the Smart Reg™ ON/OFF Knob to the OFF position, then back to the ON position.

The user must be aware of the NEMO stop free-flow feature at all times, and especially when underwater, during which the pump stops pumping air and will result in out-of-air hazards. Follow these guidelines to manage situations of Free-Flow:

- i) Do NOT press the purge button to cause the pump to run more than 20 seconds at a time,
- ii) Perform a controlled safe ascent to the surface if the pump free-flows while diving because this is an error condition and the pumping will stop after 20 seconds,
- iii) Free-flow may occur if the Smart Reg™ is placed in water with the mouthpiece out of the diver's mouth and pointing up. If this occurs, then turn the ON/OFF Knob to the ON position, place the Mouthpiece in the diver's mouth and continue normal use.

## 9.5 Avoiding and Managing Hazards While Diving

### **⚠ WARNING**

The user must successfully complete the NEMO Online Dive Training Course to understand hazard avoidance and management. The contents of this Owner's - Users Manual are guidelines for equipment use and not intended to fully cover dive safety. Refer to the NEMO Online Training Course prior to diving. Use of NEMO without completion of the training course may result in serious injury or death.

#### 9.5.1 Air Hose Entanglement

The user shall remain aware of the surroundings and how they affect the Air Hose. The Air Hose must remain protected from abrasion with other objects and must not be in excessive tension. In the event that the Air Hose becomes separated during the dive, this will result in out-of-air hazards and the user will need to make a controlled safe ascent to the surface as described in the NEMO Online Dive Training Course. In the event the Air Hose becomes entangled such that it cannot be freed, the user must remove the Dive Harness and make a controlled safe ascent as described in section 9.2 and in the NEMO Online Dive Training Course.

#### 9.5.2 Water Intrusion

Water intrusion to the user's air supply may occur for reasons such as failure to inspect the Snorkel Tube O-rings and installation, a problem with the Air Hose, or using NEMO outside of its intended use. Follow all instructions on the Component Inspection Checklist prior to diving. Do NOT use NEMO in bad weather or water conditions.

In the event of water intrusion, the user may need to make a controlled safe ascent to the surface without air supply. Be sure to exhale properly during all ascents. The user will then need to clear the water from the system. Refer to **Section 13.4 on Page 45** for instructions on clearing NEMO of water.

#### 9.5.3 Contaminated Air Intake

The air that the user breathes from the Smart Reg™ comes from the area surrounding the Snorkel Tube. Therefore, the user must remain aware of the air quality in the environment that NEMO is operating.

### **⚠ WARNING**

Never operate NEMO in an environment where toxic fumes are present - such as near boat engines, exposed chemicals, or fuel spills. Operating NEMO in an area with contaminated air will expose the user to breathing toxic air that may result in serious injury or death.

Always use NEMO in an area that has clean, open and well ventilated air.

#### 9.5.4 Out-of-Air Situations

There are several reasons a diver may suddenly experience an out-of-air situation. The diver must always be prepared for a sudden and unexpected out-of-air situation. Proper response to an out-of-air situation is taught in the NEMO Online Dive Training Course and should be periodically practiced with a dive professional.

### **⚠ WARNING**

The diver must always be prepared for out-of-air situations. Failure to follow the instructions of the NEMO Online Dive Training Course for procedures in out-of-air situations may lead to serious injury or death. The diver should practice proper response to out-of-air situations with a dive professional prior to diving.

#### 9.5.5 Weight Belts

A diving weight belt may be used to achieve neutral buoyancy underwater while diving using NEMO.

### **⚠ DANGER**

Weight belts may increase the risk of drowning hazards. Remove weight-belt at all times except immediately at the time of diving and always remain proficient in using the weight belt's quick-release mechanism. In the event of an out-of-air situation, the user must always be prepared to quick-release the weight belt.

In the event of an out-of-air hazard, the user shall always be prepared to use the quick-release of the weight belt.

#### *Pre-dive Checklist*

Successfully complete the NEMO Online Dive Training Course and maintain diving proficiency
Complete NEMO assembly and startup
Maintain awareness of Air Hose attachment to Dive Harness, positioning, entanglement, and damage risks
Prepare all other gear (mask, fins, weight belt, etc.) according to dive training and proficiency
Battery energy planning - confirm Battery charge and estimated time of use
Review procedure to stop free-flow
Rotate Smart Reg™ Knob to <b>ON</b> , purge to clear Smart Reg™
Check air flow by breathing from NEMO before entering the water
Remain aware of and be prepared to respond to hazards at all times while diving
Reconfirm air flow and proper placement and function of all gear before submerging
Remain aware of air flow to avoid free flow during exhalation
Be prepared for an out-of-air situation requiring a controlled safe ascent
Do NOT hold your breath - this may disrupt air flow and result in serious injury or death
Remain aware of Battery Energy Planning and planned dive time
Remain aware of Low Battery Behavior feature causing reduced air flow

**Table 9.5.5: Pre-Dive Checklist**

## 10 Shutdown Instructions

Follow these instructions to finish your dive safely, perform necessary maintenance, and perform the proper disassembly of NEMO:

### 10.1 Exiting the Water

1. Exit the water. While exiting the water, do not let the Air Hose as to not let it drag on the ground and protect it from entanglement, abrasion or puncture. Always be prepared to fall back into the water, which could result in an out-of-air situation.

#### **DANGER**

Unexpectedly falling into the water while wearing a weight belt may result in drowning hazards. Remove the weight-belt before or as soon as practicable after exiting water. Be ready to quick release the weight belt at all times during the dive and when near the water.

### 10.2 Systems Check

2. Press the Purge Button to confirm no water entered the Smart Reg™ while exiting the water. If water is in the air passage, refer to **Section 13.4 on Page 45** for instructions on clearing NEMO of water.

#### **DANGER**

Allowing water- especially sea water- to remain inside the NEMO pump, Air Hose and Smart Reg™ for extended periods may cause corrosion to internal components and growth of biological hazards such as mold and algae. This may result in contaminating the breathing air. Always avoid contaminants entering the air intake. Discontinue use and take corrective actions as soon as possible if contamination occurs.

3. If the air coming from the Smart Reg™ is free of water, turn the knob to the **OFF** position to prevent unintended running of the pump prior to powering down NEMO.
4. Reflect upon the dive and correct any problem with your equipment prior to further use.



### 10.3 Routine Maintenance Diving Shutdown

5. Thoroughly rinse NEMO and all wet components with fresh water, taking care to not allow any water into the Air Intake or on the Battery contacts.

#### NOTICE

Allowing water, especially sea water, to remain on NEMO components will result in accelerated wear and premature aging. Always fresh-water rinse and dry NEMO and components after use and before storage.

6. After fresh water rinse, tip NEMO in all orientations to drain water and dry the area around the electrical connector with a cotton towel.
7. Remove the Snorkel Tube from the Intake. Store in a clean dry place out of sunlight.
8. Unclip the Main Body from the Flotation Tube and remove the Flotation Tube.
9. Unlock the threaded nut on the Oral Inflation Valve of the Flotation Tube.
10. Press down on the Oral Inflation Valve and squeeze the Flotation Tube to release all the air in the Flotation Tube. Store the Flotation Tube in a clean dry place out of sunlight.
11. Loosely coil the Air Hose.
12. Wrap up the Dive Harness.
13. Remove the Power Cable Connector from the Battery Connector and slide the Battery out of the Battery Compartment. Take care to make sure all the electrical contacts remain dry.
14. Charge the Battery. Do not store the Battery discharged, this will reduce the longevity of the Battery. It is advised to store the Battery at about 40% charge if storing for long periods of time.

#### Shutdown Checklist

Exit the water cautiously being aware of diver and equipment safety
Check for water pumping from the Smart Reg™
Rotate Smart Reg™ Knob to <b>OFF</b> position
Thoroughly rinse all wet components with fresh water
Tip NEMO in all orientations to fully drain all water
Remove and store Intake Tube
Remove and store Flotation Tube
Loosely coil Air Hose and Smart Reg™
Remove Battery, taking care to keep electrical contacts dry
Charge Battery appropriately for next use or storage

Table 10 : Shutdown Checklist

## 11 Storage Instructions

1. Confirm NEMO is clean and dry. Otherwise, perform a freshwater rinse and dry all components.

### **DANGER**

Allowing water- especially sea water- to remain inside the NEMO pump, Air Hose and Smart Reg™ for extended periods may cause corrosion to internal components and growth of biological hazards such as mold and algae. This may result in contaminating the breathing air. Always avoid contaminants entering the air intake. Discontinue use and take corrective actions as soon as possible if contamination occurs.

2. Allow the components to thoroughly dry before storage. Avoid leaving NEMO components in extreme heat or prolonged exposure to sunlight. Heat and ultraviolet light will accelerate deterioration of components and may cause damage to NEMO.
3. Confirm the Air Hose will remain loosely coiled and protected while not in use.
4. Do NOT leave heavy objects on or against the Flotation Foam. That may cause permanent imprints on the Flotation Foam.
5. Store in a cool, clean and dry place. Do NOT store in a place where temperatures may exceed 60 degrees Celsius / 140 degrees Fahrenheit.

### **DANGER**

Storing the Battery in temperatures above 60 degrees Celsius may lead to fires or explosions. Always store NEMO and the Battery in a cool, clean and dry place to avoid the risk of a fire, explosion or other damage.

6. For optimal Battery longevity, charge the Battery to approximately 40% charge at least every three months.



## 12 Traveling with NEMO

As of August 2019, commercial airline regulations allow for NEMO's Battery to be brought onto an airplane without special permission because the Battery is under 100 Watt-hours. The NEMO Battery has a capacity of 72 Wh. This information is located on the label of the Battery and may need to be verified by airline personnel.

As of August 2019, The International Air Transport Association (IATA) specifies that a Battery may be stored in checked baggage only if it is securely stowed in the Battery Compartment and disconnected from the Power Cable. Spare NEMO Batteries must be packed in carry-on baggage only.



## 13 Maintenance

### 13.1 Every 3 months

When NEMO is in storage, it is advised that the Battery be charged to approximately 40% capacity once every three months to maximize the longevity of the Battery. At these intervals, it is also advised that NEMO be powered up and run for a short amount of time, about 20 seconds, to move the parts within the pump. Reminder: Do NOT run NEMO for more than 20 seconds out of water to prevent overheating.

### 13.2 Every 100 dives

After every 100 dives it is advised that NEMO be shipped to BLU3 for routine service. BLU3 will confirm all components are in good condition and repair any components that have been damaged or worn. For instructions to check the number of dives accumulated on the NEMO, refer to **Section 14.2 on Page 49**.

### 13.3 If water gets onto electrical connections

In the event that water makes it onto the electrical contacts of the Battery or the NEMO Power Cable, the user should visually inspect the contacts for signs of corrosion. If corrosion is present on the electrical contacts, use a Q-Tip cotton swab soaked with white vinegar to remove the corrosion. Do NOT use anything abrasive as it could remove the gold-plating on the contacts. Once the corrosion is wiped away, then dry the electrical contacts.

### 13.4 If water gets into the Air Intake

If water gets into the Air Intake, it is important to remove the water, flush with clean fresh water and dry the internal parts as soon as possible.

Follow these instructions:

1. Pump fresh water into NEMO's Air Intake.
2. Power NEMO on.
3. Invert NEMO upside down so that the Air Intake is pointing toward the ground.
4. Observe for water draining from the Air Intake.
5. Turn the Smart Reg™ Knob to the ON position.
6. Press the Purge Button to run NEMO for 5-10 seconds while rotating NEMO in all directions.
7. Observe for water draining from the Smart Reg™.
8. Hold the Air Hose close to the body of NEMO to a higher distance off of the ground than the rest of the Air Hose.
9. Run your hand along the Air Hose, lifting each point up to push water in the direction of the Smart Reg™, until your hand reaches the end of the Air Hose.
10. Observe for water draining from the Smart Reg™.
11. Repeat steps 2-9 until no more water drains from the Smart Reg™ or Air Intake.
12. For thorough drying prior to storage, leave the NEMO components in direct sunlight for at least eight hours.

### 13.5 If sand gets into the Air Intake

If sand or other similar contaminants enter the Air Intake, there is potential for damage to the internal components of NEMO. Refer to [diveblu3.com/support](http://diveblu3.com/support) for service.

## **⚠ WARNING**

Do NOT operate NEMO if you suspect sand has entered the inside of the pump. Sand could damage internal components and lead to out-of-air hazards while diving.



### 13.6 Air free-flowing from the Smart Reg™

Air free-flowing from the Smart Reg™ may indicate a problem with the NEMO pump or Smart Reg™. You should NOT operate NEMO if the pump continues to free-flow after attempting to correct the free-flow using the ON/OFF Knob. If free-flow occurs during a dive, it may be possible to adjust the Smart Reg™ knob toward the OFF position in order to bring the dive to a controlled conclusion. If free-flow continues and can not be stopped, the user should discontinue use and refer to [diveblu3.com/support](http://diveblu3.com/support).

### 13.7 If the Mouthpiece is damaged

A damaged mouthpiece could lead to water intrusion to the NEMO air flow or become disconnected from the Smart Reg™, leading to an out-of-air hazard. The mouthpiece shall be replaced if damaged.

To replace the Smart Reg™ Mouthpiece, follow these instructions:

1. Obtain a new mouthpiece. Any standard scuba regulator mouthpiece will work.
2. Obtain a UV-resistant zip tie with a width of 0.19", length of 8" and tensile strength of 75 lb.
3. Use a flush cutter tool to cut and remove the Mouthpiece zip tie that is holding the damaged Mouthpiece to the Smart Reg™.
4. Remove the damaged Mouthpiece by sliding it off.
5. Discard of the old zip tie and damaged Mouthpiece.
6. Install a new Mouthpiece by pushing it all the way seated onto the Smart Reg™.
7. Wrap the new zip tie around the groove on the Mouthpiece and push the end of the zip tie through the head of the zip tie.
8. Position the head of the zip tie at the bottom right of the Mouthpiece, away from potential interference with the user.
9. Pull the zip tie tight so the Mouthpiece cannot be pulled off.
10. Using a flush cutter tool to cut off the excess length of the zip tie.

### 13.8 If the Air Hose is damaged

The Air Hose may become damaged if not treated with care. The Air Hose is designed to withstand normal diving use, but may become damaged if it comes into contact with sharp objects or if exposed to abrasion. If the Air Hose is damaged do not use it. Return your NEMO to BLU3 for repair.

### 13.9 If the Snorkel Tube O-rings are lost or damaged

The Snorkel Tube O-rings are designed to withstand hundreds of uses, but could become damaged or lost if not treated with care. Do NOT operate NEMO if either or both of the O-rings are lost or damaged.

You may replace the O-rings by following these instructions:

1. Obtain O-ring(s) size 014, material EPDM, and durometer of 70A from BLU3 at [diveblu3.com/support](http://diveblu3.com/support).
2. Remove old O-ring(s) from the Snorkel Tube using a small pointed object to pry the O-ring(s) out of the groove and slide it off the Snorkel Tube.
3. Discard of the old O-ring(s).
4. Apply O-ring lubricant to the new O-ring(s).
5. Install the new O-ring(s) by sliding it over the bottom of the Snorkel Tube and pushing it up and into and into one of the O-ring grooves.
6. Press the O-ring into the O-ring groove until it is fully smoothly seated all the way around the O-ring groove.
7. Test the fit of the new O-ring(s) by installing the Snorkel Tube into the NEMO Air Intake.

## **⚠ WARNING**

The fit should be snug and not loose. The Snorkel Tube should be able to be pressed into the Air Intake about one inch. If the O-ring(s) installed cause an improper fit of the Snorkel Tube, this could result in water in the air flow and out-of-air hazards while diving. Do NOT use the NEMO if the Snorkel Tube does not fit properly.

8. Refer to **Section 14.4 on Page 50** for instructions to check for leaks.

### 13.10 If the Dive Harness is damaged

The Dive Harness secures the Air Hose to the user's body and when adjusted properly prevents strain on the Mouthpiece. If your Dive Harness is damaged, do NOT dive, refer to [diveblu3.com/support](https://diveblu3.com/support) for a replacement, then follow the instructions in **Section 14.6 on Page 52**.

#### **⚠WARNING**

**If the Dive Harness becomes damaged, do NOT dive with the NEMO until the Dive Harness has been replaced. Diving with a damaged Dive Harness could result in out-of-air hazards.**

### 13.11 If the Harness Attachment Point is damaged

The Harness Attachment Point secures the Air Hose to the Dive Harness and when adjusted properly prevents strain on the Mouthpiece.

#### **⚠WARNING**

**If the Harness Attachment Point becomes damaged, do NOT dive with the NEMO until the Harness Attachment Point has been replaced. Diving with a damaged Harness Attachment Point could result in out-of-air hazards.**

Follow these instructions to replace your Harness Attachment Point:

1. Obtain a new Harness Attachment Point by referring to [diveblu3.com/support](https://diveblu3.com/support).
2. Using a T10 Torx screwdriver, loosen each of the two screws holding the Harness Attachment Point together.
3. Remove the Harness Attachment Point halves and screws and discard them.
4. Lay the Air Hose on a flat table.
5. At the desired distance from the Smart Reg™ to the Dive Harness, place the Air Hose between the two halves of the Harness Attachment Point.
6. Align the ridges of the Air Hose with the grooves in each half of the Harness Attachment Point such that the two halves are flush with each other and not pinching any part of the Air Hose.
7. Using a T10 Torx Screwdriver tighten the screws evenly, alternating from one screw to the other until both are snug.
8. Gently pull the Air Hose away from the Harness Attachment Point to confirm it does not slide through the Harness Attachment Point. Do NOT pull with excessive force which could damage the Air Hose.
9. If the Air Hose slides through the Harness Attachment Point, tighten the two screws tighter and repeat steps 9 and 10. Do NOT over-tighten as this could snap the screws in half.
10. If the Air Hose still slides through the Harness Attachment Point, refer to [diveblu3.com/support](https://diveblu3.com/support).



## 14 Troubleshooting

Disassembly of NEMO is not permitted by the user. Follow only the instructions in this section for troubleshooting. Do NOT disassemble or modify any components that are beyond the scope of this Users Manual.

### 14.1 If NEMO is Beeping an Error Code

Upon startup, NEMO will make a musical startup tone that is made up of four changing, high-pitched beeps. If other beeps occur prior to the startup tone, take note of how they sound and how many beeps occur. If you need to hear the beeps again, unplug the Battery for at least 5 seconds then plug it back in.

#### Error Code Meanings:

Number of Beeps Prior to Startup Tone	Meaning
1	Air flow is beginning to decline. Battery is getting low. Charge the Battery before diving.
2	Air flow is moderately reduced. Battery is close to fully depleted. Charge the Battery before diving.
3	Air flow is extremely low. Battery is depleted. Charge the Battery before diving.
14	ERROR Code: Smart Reg <sup>TM</sup> needs to be calibrated. Do NOT operate NEMO. Refer to <a href="https://diveblu3.com/support">diveblu3.com/support</a>

## 14.2 Estimating Number of Dives on NEMO

The DiveOMeter is a feature designed to inform the user of how many dives the NEMO has performed. This information is important for scheduling routine maintenance. The DiveOMeter uses audible beeps to indicate the estimated number of dives.

### NOTICE

The DiveOMeter is not precise and the actual number of dives will vary depending on the user, environmental conditions, and other factors. Use the DiveOMeter table only for an approximation of the number of dives.

Follow these instructions to activate the DiveOMeter:

1. Unplug the Battery for at least 10 seconds.
2. Turn the Smart Reg™ Knob to the ON position.
3. Connect the Battery to the NEMO Power Cable.
4. Perform steps 5-8 within the first 10 seconds after connecting the Battery.
5. Turn the Smart Reg™ Knob to the OFF position.
6. Turn the Smart Reg™ Knob to the ON position.
7. Turn the Smart Reg™ Knob to the OFF position.
8. Turn the Smart Reg™ Knob to the ON position.
9. Count the number of audible beeps from NEMO.
10. Use the Dive-O-Meter Table to correlate the number of beeps you counted with the approximate number of dives the NEMO has performed.

*DiveOMeter Table:*

Number of Beeps	Number of Dives
1	0-5
2	5-10
3	10-15
4	15-25
5	25-35
6	35-50
7	50-75
8	75-100
9	100-125
10	125-150
11	150-200
12	200-250
13	250-300
14	300-350
15	350-400
16	400-450
17	450-500
18	500-600
19	600-700
20	700-800
21	800-900
22	900-1000
23	1000-1250
24	1250-1500
25	1500-1750
26	1750-2000
27	2000-2500
28	2500-3000
29	3000-4000
30	4000-5000
31	5000+



### 14.3 Calibrating the Smart Reg™

If the Smart Reg™ is not causing the NEMO to pump normally, it may need calibration. If you believe that your Smart Reg™ may need calibration, refer to [diveblu3.com/support](https://diveblu3.com/support) for help.

### 14.4 Identifying Leaks

If water is coming from the airway within intended use conditions, there may be a leak in a component of NEMO. Identifying leaks is a process of elimination that will need to be completed in steps. Follow the steps in the order below to identify the location of the leak.

#### 14.4.1 Air Hose Leak Check

1. Follow the instructional steps 2-11 in **Section 13.4 on Page 45** to check for pre-existing water inside of NEMO.
2. Place NEMO on a flat surface out of the water and away from other objects.
3. Place only the Air Hose underwater. .
4. With NEMO's Air Hose submerged press the Purge Button for 10 seconds and look for air bubbles coming from the Air Hose.
5. Pause for 50 seconds while keeping NEMO's Air Hose submerged.
6. Repeat step 3 and 4 as many times as necessary.
7. Repeat the instructional steps 2-11 in **Section 13.4 on Page 45** to check for water inside of NEMO.
8. If water is found coming from NEMO, it is likely that the Air Hose is damaged. Do NOT operate NEMO and refer to [diveblu3.com/support](https://diveblu3.com/support) to have your NEMO serviced.

#### 14.4.2 Pump Body Leak Check

## NOTICE

**Only proceed with the Pump Body leak check after the Air Hose is confirmed to be in good condition.**

1. Follow the instructional steps 2-11 in **Section 13.4 on Page 45** to check for pre-existing water inside NEMO.
2. Place NEMO in the water and keep the top of the Flotation Foam above the water so that the seal between the Air Intake and the Snorkel Tube is not submerged at all.
3. With NEMO's Air Intake above the surface of the water, press the Purge Button for 10 seconds.
4. Pause for 10 seconds, while keeping NEMO's Air Intake above water.
5. Repeat step 3 and 4 as many times as necessary.
6. Repeat the instructional steps 2-11 in **Section 13.4 on Page 45** to check for water inside of NEMO.
7. If water is observed coming from NEMO, it is likely a leak in a component on the Pump Body. Do NOT operate NEMO and refer to [diveblu3.com/support](https://diveblu3.com/support) to have your NEMO serviced.

#### 14.4.3 Snorkel Tube Leak Check

## NOTICE

**Only proceed with the Snorkel Tube leak check after the Air Hose and Pump Body are confirmed to be in good condition.**

1. Follow the instructional steps 2-11 in **Section 13.4 on Page 45** to check for pre-existing water inside of NEMO.
2. Verify the Snorkel Tube is in place and properly seated at the Air Intake.
3. Place NEMO in the water and push the top of the Flotation Foam underwater so that the seal between the Air Intake and the Snorkel Tube is completely submerged.
4. With NEMO's Air Intake still submerged, press the Purge Button for 10 seconds.
5. Pause for 10 seconds, while keeping NEMO's Air Intake submerged.
6. Repeat step 3 and 4 as many times as necessary.
7. Repeat the instructional steps 2-11 in **Section 13.4 on Page 45** to check for water inside of NEMO.
8. If water is observed coming from NEMO, it is likely a leak in the Snorkel Tube O-rings or Snorkel Tube itself. Do NOT operate NEMO and refer to [diveblu3.com/support](https://diveblu3.com/support) for instructions to resolve the leak.



#### 14.5 If NEMO is Not Pumping Air

If NEMO is not pumping air when you inhale on the Smart Reg™ or press the Purge Button, try each of the following steps before referring to [diveblu3.com/support](https://diveblu3.com/support) for additional information.

- Confirm the Smart Reg™ Knob is set to the ON position, as shown in Figure 8.6.1 on Page 31.
- Confirm the Battery is connected.
- Confirm the Battery is charged.
- Confirm the Intake Plug is not installed.
- If the Intake Plug was installed at the time the Battery was connected, your Battery, disconnect the Battery, remove the Intake Plug and then reconnect the Battery.
- After disconnecting and reconnecting the Battery, confirm the audible beeps prior to the startup tone is 3 or less. For more information, refer to **Section 14.1 on Page 48**.

## 14.6 Installing the Dive Harness to the Harness Attachment Point

The Dive Harness is attached to the Air Hose at the Harness Attachment Point. If the Dive Harness needs to be installed to the Harness Attachment Point, you will need to follow these instructions:



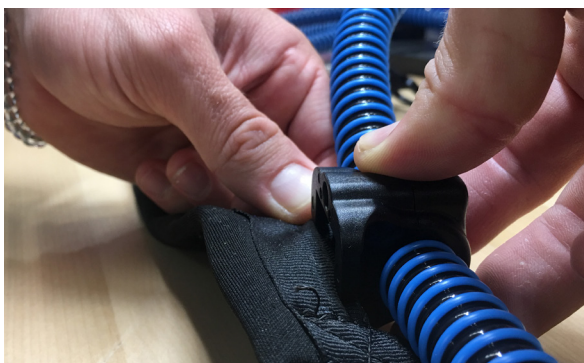
1. Gently lay the Air Hose and Smart Reg™ down on a flat surface free of sharp objects.
2. On the Dive Harness, locate the 3" Attachment Loop located about 9" away from the large female buckle.
3. Lay the Dive Harness down with the Attachment Loop next to the Harness Attachment Point and the large male buckle in the same direction as the Smart Reg™.



4. Align the Harness Attachment Point with the Attachment Loop.



5. Insert the edge of the Attachment Loop into the right side slot of the Harness Attachment Point.



6. Insert the edge of the Attachment Loop into the left side slot of the Harness Attachment Point.



7. Pull the Attachment Loop all the way through the left side slot of the Harness Attachment Point.



8. Flatten out the Attachment Loop and push the Harness Attachment Point all the way to the left side of the Attachment Loop.



9. Pull the Attachment Loop all the way through the right side slot of the Harness Attachment Point.



10. Flatten out the Attachment Loop.



11. Slide the Harness Attachment Point left and right to ensure that it has been installed correctly.



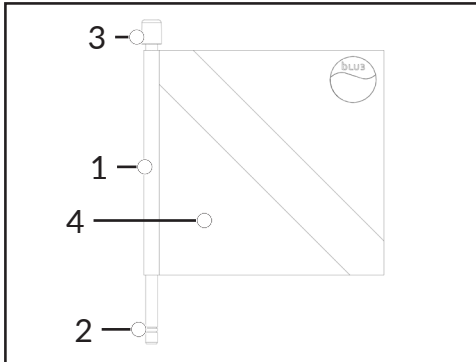
12. Confirm the orientation of the Dive Harness with the Smart Reg™ matches the photo.

## 15 Parts and Service

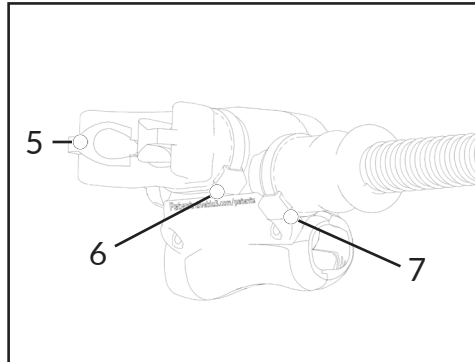
### 15.1 Replacement Parts

Replacement parts that can be replaced by the user are shown and listed below. If you need any of these parts, contact BLU3 directly by referring to [diveblu3.com/support](http://diveblu3.com/support) or search at the sources of supply listed in the Spare Parts Table below with the corresponding description of the part. Use this table for special disposal instructions of these parts.

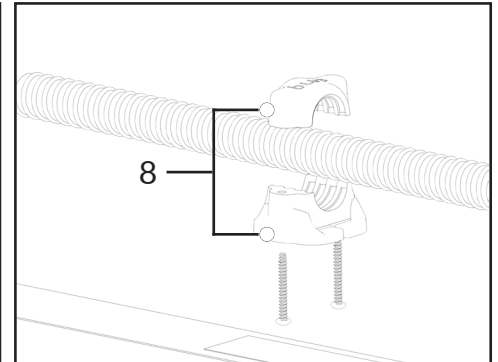
#### Replacement Parts



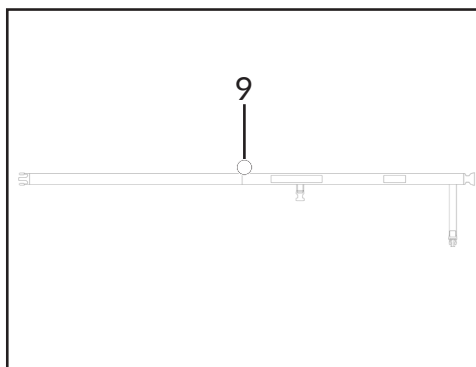
Snorkel Tube (1), Snorkel Tube O-rings (2), Drip Cap (3), Dive Flag (4)



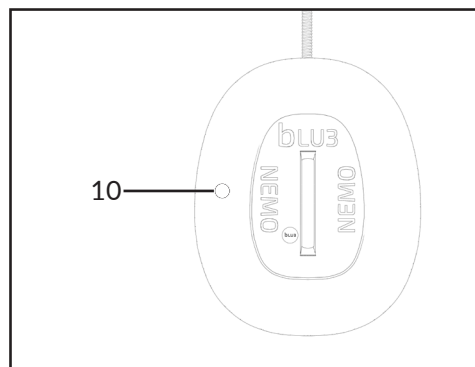
Mouthpiece (5), Mouthpiece Zip Tie (6), Hose Cuff Zip Tie (7)



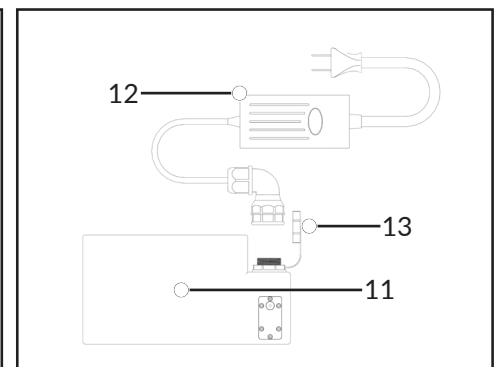
Harness Attachment Point (8)



Dive Harness (9)



Flotation Tube (10)



Battery (11), Battery Charger (12), Battery Dust Cap (13)

#### Spare Parts Table

Diagram Number	Part Name	Sources of Supply	Description	Disposal Method
1	Snorkel Tube	Only BLU3	17" long tubing for Air Intake	Normal
2	Snorkel Tube O-ring(s)	BLU3, O-ring Suppliers, Online	Size: 014, Material: EPDM, Durometer: 70A	Normal
3	Drip Cap	Only BLU3	Cap for placement on top of Snorkel Tube	Normal
4	Dive Flag	Only BLU3	Red and white or blue and white colored flag	Normal
5	Mouthpiece	BLU3, Dives Store, Online	Standard diving regulator mouthpiece	Normal
6	Mouthpiece Zip Tie	BLU3, Hardware Stores, Online	UV-resistant, width: 0.19", length: 8", tensile strength: 75 lb	Normal
7	Hose Cuff Zip Tie	BLU3, Hardware Stores, Online	UV-resistant, width: 0.19", length: 8", tensile strength: 75 lb	Normal
8	Harness Attachment Point	Only BLU3	Two-piece clamp for attaching Dive Harness to Air Hose to user	Normal
9	Dive Harness	Only BLU3	Neoprene-covered webbing for attaching Air Hose to user	Normal
10	Flotation Tube	Only BLU3	Inflatable tube with clips	Normal
11	Battery	Only BLU3	TLH-INR186502R-72 Battery	WEEE
12	Battery Charger	Only BLU3	100-240V 50/60Hz Charger for TLH-INR186502R-72 Battery	WEEE
13	Battery Dust Cap	Only BLU3	Dust cap for TLH-INR186502R-72 Battery	Normal

### 15.2 Sending Your NEMO In for Service

For service or repairs, refer to [diveblu3.com/support](http://diveblu3.com/support)

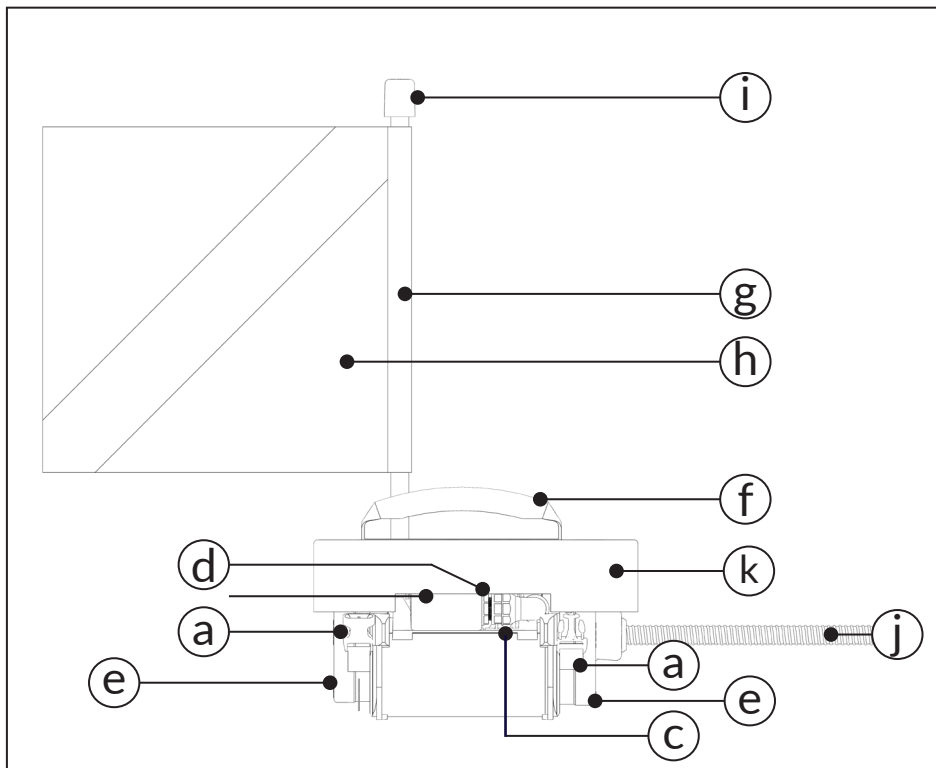
## 16 Patent Pending

The technology used in the design of NEMO is patent-pending at the time this Owner's - Users Manual is being written. Information on the patent may be found at [diveblu3.com/patents](http://diveblu3.com/patents).



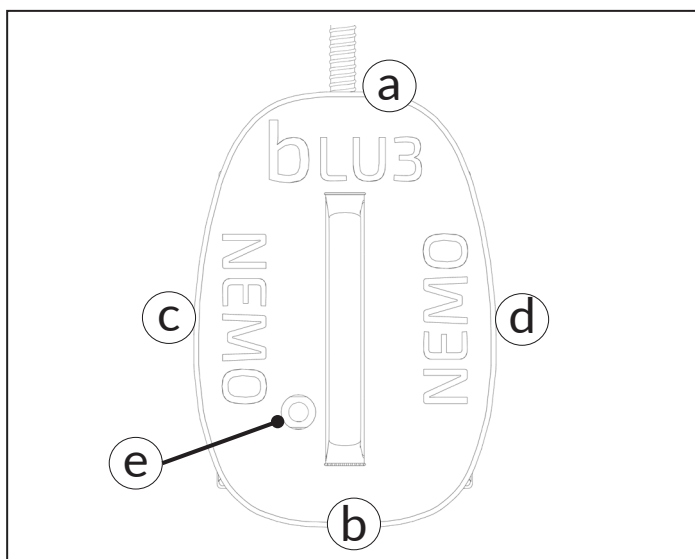
## 17 Component Diagrams

### 1. NEMO Right View with Red-and-White Flag (No Flotation Tube)



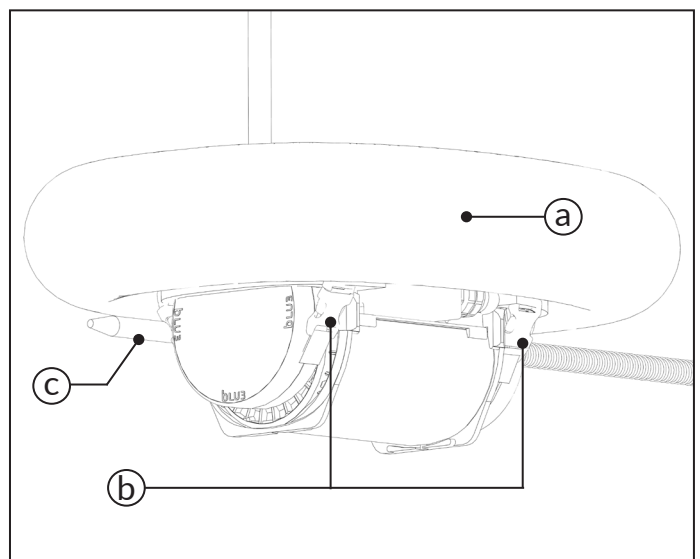
- a. Body Clips (*Front & Rear*)
- b. Battery
- c. Power Connector
- d. Battery Connector
- e. End Caps
- f. Top Handle
- g. Snorkel Tube
- h. Dive Flag (Red-and-White)
- i. Drip Cap
- j. Air Hose
- k. Flotation Foam

### 2. NEMO Top View (No Flotation Tube)



- a. Front
- b. Rear
- c. Left
- d. Right
- e. Intake

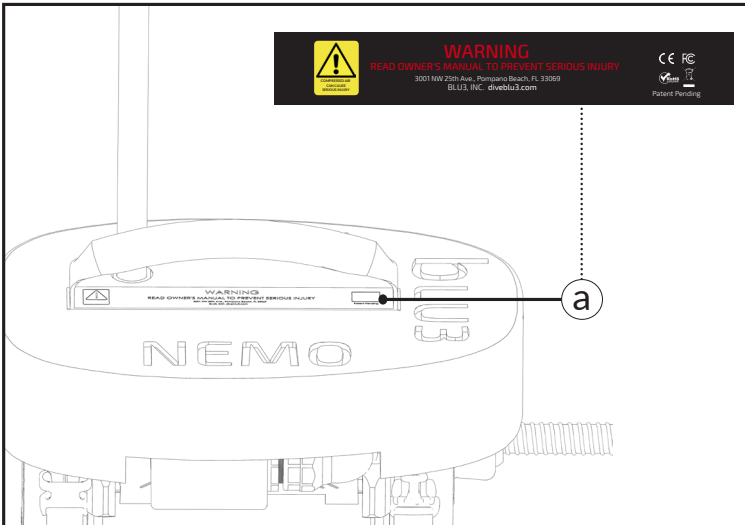
### 3. NEMO View of Float Clips



- a. Flotation Tube
- b. Body Clips mating with Flotation Tube Clips (*Front & Rear*)
- c. Oral Inflation Valve



#### 4. NEMO Top View (No Flotation Tube)

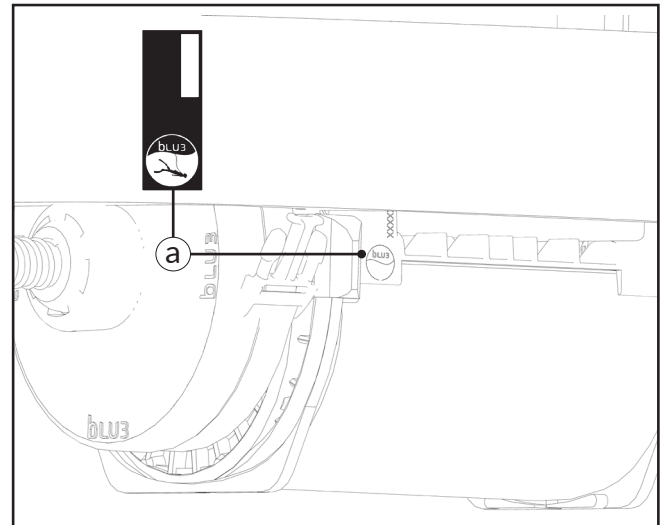


a. Warning Label

**WARNING**

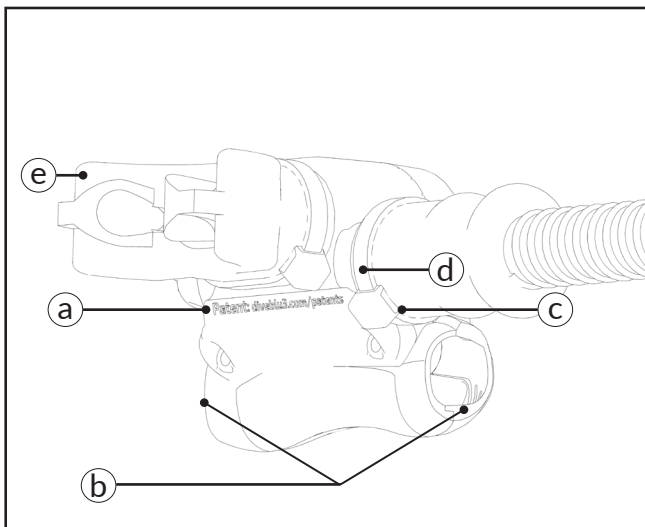
Do Not Remove Warning Label.

#### 5. NEMO Serial Number



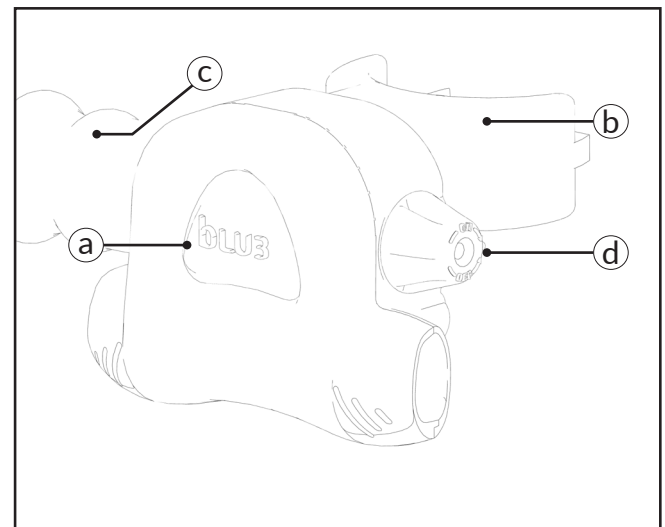
a. Serial Number

#### 6. Regulator Mouthpiece View



- a. Patent Website
- b. Exhaust Ports
- c. Hose Cuff Zip-Tie
- d. Mouthpiece Zip-Tie
- e. Mouthpiece

#### 7. Regulator ON/OFF Knob and Purge Button View



- a. Purge Button
- b. Mouthpiece
- c. Hose Cuff
- d. ON/OFF knob



## **APPENDIX A: Instructions to access additional information and NEMO Online Dive Training Course**

**To find additional information, go to [diveblu3.com](http://diveblu3.com).**

**To access the NEMO Online Dive Training Course:**

1. Go to [diveblu3.teachable.com](http://diveblu3.teachable.com)
2. Click "Enroll Now"
3. Sign up with your full name, email address and create a password
4. Click on "NEMO Online Dive Training Course"
5. Click "Enroll in Course for FREE"
6. Click "Start next lecture"
7. Follow the instructions of the course and complete the course in its entirety.

## **APPENDIX B: NEMO Fitness to Dive Evaluation**

### **NEMO FITNESS TO DIVE EVALUATION**

Participant's Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

Surface Supplied Air “SSA” diving with NEMO and BLU3 products is fun and exciting but can be a strenuous and demanding activity. As with any underwater activity using life support equipment pumping compressed air to a diver below the surface, there are inherent risks that may cause serious illness, injury and death. SSA divers need to be in good health to dive. If you have any questions about your medical, mental or physical fitness to dive, you should consult a physician to assess your individual risks factors.

This form is to help you determine if you should be examined by a physician prior to diving. If you have any doubt about your fitness to dive, then you must obtain approval to dive from a physician. Failure to obtain a physician's approval to dive may significantly increase your risk of illness, injury or death. You are solely responsible for honestly evaluating your fitness to dive and you are ultimately responsible for your safety and wellbeing when swimming and diving.

Answer each question about your past or present medical history in the corresponding [NO] or [YES] box. If you are not sure of the correct answer, then answer “YES”. A “YES” response indicates an increased risk factor that must be evaluated by a physician. If any of these conditions apply to you, then you must obtain approval to dive from a physician before SSA diving with NEMO and BLU3 products.

1. Are you currently being treated or under the care of a medical professional for a medical, mental or physical condition? [NO] [YES]
2. Do you take a prescription medication (not including birth control)? [NO] [YES]
- Do you have or have you ever been treated for:
3. A heart, circulatory, blood, blood pressure, or bleeding abnormality? [NO] [YES]
4. A stroke, seizure, head injury, loss of consciousness, migraines, behavioral or neurologic condition? [NO] [YES]
5. An ear, sinus, mouth, throat or lung disorder – including asthma? [NO] [YES]
6. Diabetes, severe allergies, obesity, stomach or intestinal disorders? [NO] [YES]
7. Musculoskeletal, strength, stamina or mobility disorders? [NO] [YES]

If you answered YES to any of these conditions, then you must be evaluated by a physician to approve your fitness to dive. You are responsible to obtain and keep a written document from the physician stating you are fit to dive.

Additionally, if you are under the influence of alcohol or recreational drugs, unable to swim, prone to panic attacks, unable to exercise good judgment or you are unable to be responsible for you own safety and wellbeing, then you have a significant increase to risks of illness, injury and death while in the water and you should unconditionally refrain from swimming or diving.



## **APPENDIX C: BLU3 Assumption of Risk, Waiver, Liability Release & Hold Harmless Agreement**

### **Assumption of Risk, Waiver, Liability Release, and Hold Harmless Agreement**

#### **IMPORTANT – READ CAREFULLY – THIS AGREEMENT AFFECTS YOUR LEGAL RIGHTS!**

Surface Supplied Air diving with NEMO and BLU3 products is a fun and exciting way to explore the shallow depths of the underwater world. As with any underwater adventure that relies on air delivery equipment there are inherent risks that may result in serious illness, injury or death. Each NEMO diver assumes these inherent risks regardless of experience, age or environment just as swimmers and scuba divers assume these risks in supervised and unsupervised settings, at pools, open water, around watercraft and other water hazards. In consideration of using BLU3 dive gear the OWNERS/USERS expressly agree to the terms and conditions of this Assumption of Risk Liability Release, Wavier and Hold Harmless Agreement, (herein referred to as **AGREEMENT**).

**“OWNERS/USERS”** shall refer collectively to the following: each individual owner of a NEMO and BLU3 products, each individual user of a NEMO or BLU3 products, any person who suffers loss in the form of property damage, illness, injury, or death, including but not limited to family, heirs, assigns, entities or anyone who may have a claim, cause of action, legal right or other remedy as a consequence of property damage, illness, injury or death as a result of using BLU3 products.

**“RELEASED PARTIES”** shall refer collectively to the following: BLU3, Inc., Brownies Marine Group, Inc., including but not limited to their respective manufacturers, assemblers, distributors, retailers, service centers, owners, employees, representatives, agents, independent contractors, affiliates, consultants, investors, insurers, assigns, successors, and any other person or entity that may be liable to OWNERS/USERS for property damage, illness, injury or death as a result of a BLU3 product.

**VOLUNTARY PARTICIPATION & INFORMED CONSENT:** OWNERS/USERS voluntarily and with informed consent participate in activities using NEMO and BLU3 products with the understanding there are inherent risks of property damage, illness, injury and death associated with their use.

#### **OWNERS/USERS EXCLUSIVELY BEAR THE FOLLOWING RESPONSIBILITIES:**

- OWNERS/USERS are responsible for the safety of each person using NEMO and BLU3 products.
- OWNERS/USERS are responsible for reading and complying with the most recent edition of the Owner's - Users Manual found at [diveblu3.com/owners-users-manual](http://diveblu3.com/owners-users-manual)
- OWNERS/USERS are responsible to verify all persons using NEMO and BLU3 products have completed the NEMO Online Dive Training Course.
- OWNERS/USERS are responsible for appropriately supervising each NEMO diver while they are in the water.
- OWNERS/USERS are responsible for each NEMO diver being medically, mentally and physically fit to dive using NEMO. See the BLU3 Medical Screening Form at [diveblu3.com/medical-screening](http://diveblu3.com/medical-screening)
- OWNERS/USERS are responsible for at least one adult diver in the water to supervise and be responsible for each youth (under 18 years old) diving with NEMO or BLU3 products.
- OWNERS/USERS are responsible for properly checking each NEMO diver's buoyancy in accordance with instructions found at [diveblu3.teachable.com](http://diveblu3.teachable.com)
- OWNERS/USERS are responsible to ensure each NEMO diver is properly trained in and uses appropriate ascent procedures to avoid lung overexpansion injuries in accordance with instructions found at [diveblu3.teachable.com](http://diveblu3.teachable.com)
- OWNERS/USERS are responsible to ensure each NEMO diver only uses the NEMO and BLU3 equipment as designed and expressly intended.
- OWNERS/USERS shall be exclusively responsible and liable for any injuries and damages caused by NEMO and BLU3 products.

**ASSUMPTION OF RISK:** Each OWNER/USER of NEMO and BLU3 products expressly assumes full and complete risk of property damage, illness, injury and death as a result of use of RELEASED PARTIES equipment, failure to warn, inadequate instructions and/or product liability due to maintenance failure, defect or implied warranty. OWNERS/USERS expressed assumption of risk extend to each and every diver, person and/or entity that may suffer loss due to property damage, illness, injury or death associated with use of any RELEASED PARTIES products.

**WAIVER & RELEASE OF LIABILITY:** OWNERS/USERS expressly WAIVE and RELEASE the RELEASED PARTIES all liability and responsibility whatsoever resulting in property damage, illness, injury or death caused by negligence including gross negligence by the RELEASED PARTIES, whether the negligent act(s) were passive or active, direct or indirect, to the fullest extent allowed by law, even if WAIVING and RELEASING the RELEASED PARTIES is socially unacceptable or generally against public expectations. By signing this AGREEMENT, the OWNERS/USERS expressly, completely and unconditionally agree not to sue the RELEASED PARTIES for negligence resulting in property damage, illness, injury or death.

**HOLD HARMLESS & INDEMNIFICATION:** OWNERS/USERS agree to HOLD HARMLESS and INDEMNIFY the RELEASED PARTIES from all claims, causes of action or lawsuits, arising from use of BLU3 products, including but not limited to the NEMO surface supplied air diving systems. This AGREEMENT obligates OWNERS/USERS to pay all costs to investigate, defend, pay judgments, court costs, attorneys' fees, etcetera incurred by RELEASED PARTIES to enforce this AGREEMENT.

**LEGAL CONTRACT, GOVERNING LAW & SEVERABILITY:** OWNERS/USERS understand this AGREEMENT is a contract giving up legal rights. This AGREEMENT shall be in full legal force from the date signed into the future until all claims and legal action against the RELEASED PARTIES have been fully resolved. All legal actions arising as a result of this AGREEMENT shall be governed by the Laws of the State of Florida and the exclusive venue and jurisdiction of any legal action shall be Broward County, Florida. If any portion of this AGREEMENT is found to be unenforceable or invalid, then that portion shall be severed, and the remainder shall continue in full legal force. Any digital completion, signature, confirmation or electronic format of this AGREEMENT shall have full legal force as if it was an original signed document. The OWNERS/USERS voluntarily enter into this AGREEMENT based exclusively on the preprinted terms of the AGREEMENT without modification or relying on any other representations or assurances.

**OWNERS/USERS have fully read, understand and agree to be legally bound by this AGREEMENT. By signing this AGREEMENT, OWNERS/USERS are giving up legal rights for myself and all others who may have a claim, on my or their behalf, against the RELEASED PARTIES as a result of property damage, illness, injury or death caused by NEMO and BLU3 products.**

OWNERS/USERS Name:

Signature:

Date:



## **APPENDIX D: Limited Warranty**

# **NEMO Limited Warranty**

### **What is Covered**

BLU3 products are warranted to be free of defects in materials and workmanship. BLU3 will repair, replace, or refund valid warranty claims, at our discretion. BLU3 shall not be liable for any special, incidental, or consequential damages beyond the wholesale purchase price.

### **What is not Covered**

1. This warranty does NOT cover packaging and/or shipping charges to or from BLU3.
2. Inspection, service and/or labor charges are not covered and will be paid by the consumer.
3. Some parts are subject to wear, even under normal or minimal use. Components should be inspected for wear on a regular basis as instructed in the NEMO Owner's - Users Manual document. Replacement of worn items constitutes normal maintenance and is the responsibility of the owner.
4. This warranty does NOT cover damage resulting from the introduction of saltwater, gas, oil, sand, or other contaminants, normal wear, improper use, improper maintenance, neglect, alteration, or unauthorized repair.
5. This does not warrant that the product won't become obsolete at some point in the future.
6. In the event that NEMO is serviced or repaired by anyone other than BLU3, this warranty is void.

### **How Long Does this Coverage Last**

This warranty lasts for one (1) year from the date of the original purchase of this product.

### **Who is Covered**

To obtain the benefit of this warranty, you must have your product registered using the Product Registration form at [diveblu3.com/support](http://diveblu3.com/support). To register your product, you need the serial number on your NEMO and the confirmation code that you will receive after completion of the NEMO Online Dive Training Course. This limited warranty covers only the user who originally registers the product.

### **What BLU3 Will Do**

BLU3 will repair any product that proves to be defective in materials or workmanship. BLU3 will repair or replace at BLU3's discretion.

### **How to Obtain Services**

To obtain services, visit [diveblu3.com/support](http://diveblu3.com/support) and click on "SCHEDULE SERVICE." Once BLU3 contacts you with information about your service, you will need to deliver the complete product via prepaid transportation to BLU3.

### **No Other Express Warranty Applies**

This warranty is the sole and exclusive warranty. No employee, agent, dealer, or other person is authorized to alter this warranty to make any other warranty on behalf of BLU3.

### **Limitation on Liability**

BLU3 shall not be responsible for any incidental or consequential damages. Some countries, districts, or states do not allow the limitation or exclusion of relief, incidental, consequential, special, or indirect damages, or the limitation of liability to special amounts, so the above limitations or exclusions may not apply to you.



## APPENDIX E: Checklists

### *Component Inspection Checklist*

<b>Power Cable O-ring</b>	<ul style="list-style-type: none"> <li>• Confirm the orange O-ring inside the NEMO power cable connector is present and fully intact without damages.</li> </ul>
<b>Battery</b>	<ul style="list-style-type: none"> <li>• Confirm the outer edges are fully sealed, no gaps.</li> <li>• Confirm there is no damage or cracks.</li> <li>• Confirm the LED gauge lights up and the amount of charge is understood by the user.</li> </ul>
<b>Snorkel Tube O-rings</b>	<ul style="list-style-type: none"> <li>• Confirm both O-rings are present.</li> <li>• Confirm the O-rings are fully seated in their grooves.</li> <li>• Check for scratches, nicks, tears, sand, dirt and clean or replace as necessary.</li> </ul>
<b>Dive Flag</b>	<ul style="list-style-type: none"> <li>• Confirm the appropriate Dive Flag is installed on the Snorkel Tube.</li> </ul>
<b>Drip Cap</b>	<ul style="list-style-type: none"> <li>• Confirm the Drip Cap is fully inserted onto the Snorkel Tube.</li> </ul>
<b>Smart Reg™ Mouthpiece</b>	<ul style="list-style-type: none"> <li>• Confirm there are no tears, holes, sand or dirt on the mouthpiece.</li> <li>• Confirm the zip tie is in good condition and holds the Mouthpiece securely on the Smart Reg™.</li> </ul>
<b>Smart Reg™ Hose Cuff</b>	<ul style="list-style-type: none"> <li>• Confirm there are no tears or holes in the cuff.</li> <li>• Confirm the zip tie is in good condition and holds the cuff securely in place.</li> </ul>
<b>Smart Reg™ Purge Button</b>	<ul style="list-style-type: none"> <li>• Confirm there are no tears or holes in the silicone face of the Purge Button.</li> <li>• Confirm there is no buckling, folding, or gaps between the Purge Button and the Smart Reg™ housing.</li> </ul>
<b>Air Hose</b>	<ul style="list-style-type: none"> <li>• Confirm there are no punctures, holes, kinks or binds in the hose.</li> </ul>
<b>Harness Attachment Point</b>	<ul style="list-style-type: none"> <li>• Confirm the Harness Attachment Point is properly attached and not damaged.</li> <li>• Confirm the Dive Harness buckles, attachments and webbing are all in good condition.</li> </ul>

### Startup Checklist

System Inspection: components intact, in-place, un-damaged and functional
Smart Reg™ Knob set to OFF
Battery level is fully, or at least sufficiently, charged
Battery is installed and connector is tight/waterproof Startup tone, Smart Reg™ Knob ON, NEMO is pumping & air flows on inhalation
Smart Reg™ Knob OFF until ready to dive
Flotation Tube inflated properly attached to NEMO
Dive Flag, Drip Cap, O-rings and Snorkel Tube properly attached
Diver Harness attached to Air Hose
Hose length between Smart Reg™ and Dive Harness properly adjusted
Dive Harness adjusted properly for diver and easy to remove quickly if necessary

### *Pre-dive Checklist*

Successfully complete the NEMO Online Dive Training Course and maintain diving proficiency
Complete NEMO assembly and startup
Maintain awareness of Air Hose attachment to Dive Harness, positioning, entanglement, and damage risks
Prepare all other gear (mask, fins, weight belt, etc.) according to dive training and proficiency
Battery energy planning - confirm Battery charge and estimated time of use
Review procedure to stop free-flow
Rotate Smart Reg™ Knob to <b>ON</b> , purge to clear Smart Reg™
Check air flow by breathing from NEMO before entering the water
Remain aware of and be prepared to respond to hazards at all times while diving
Reconfirm air flow and proper placement and function of all gear before submerging
Remain aware of air flow to avoid free flow during exhalation
Be prepared for an out-of-air situation requiring a controlled safe ascent
Do NOT hold your breath - this may disrupt air flow and result in serious injury or death
Remain aware of Battery Energy Planning and planned dive time
Remain aware of Low Battery Behavior feature causing reduced air flow



### *Shutdown Checklist*

Exit the water cautiously being aware of diver and equipment safety
Check for water pumping from the Smart Reg™
Rotate Smart Reg™ Knob to <b>OFF</b> position
Thoroughly rinse all wet components with fresh water
Tip NEMO in all orientations to fully drain all water
Remove and store Intake Tube
Remove and store Flotation Tube
Loosely coil Air Hose and Smart Reg™
Remove Battery, taking care to keep electrical contacts dry
Charge Battery appropriately for next use or storage





**diveBLU3.com**