

SUBWING®

| **USER &
SAFETY MANUAL**

Congratulations!

You are now an owner of a Subwing!

We hope this product will contribute to the joyful moments in your life and give you many memorable experiences flying under water. But first, it is essential that you fully read this manual in order to learn how to use the Subwing safely.

If you have any questions, ideas, thoughts or criticism regarding anything about our products, or if you simply just want to share your Subwing experience, do not hesitate contacting us by email or on social media. We'd love to hear from you!



Contact details:

Subwing AS
Rigetjoennveien 3,
4626 Kristiansand, Norway
E-mail: subwing@subwing.com

Website: www.subwing.com

Getting started

To make your Subwing ready for action you first have to assemble the Subwing by connecting the two wings with the swivel. The swivel conveniently enables for quick assembly and disassembly of your Subwing for easy storage and transport.

Assembly

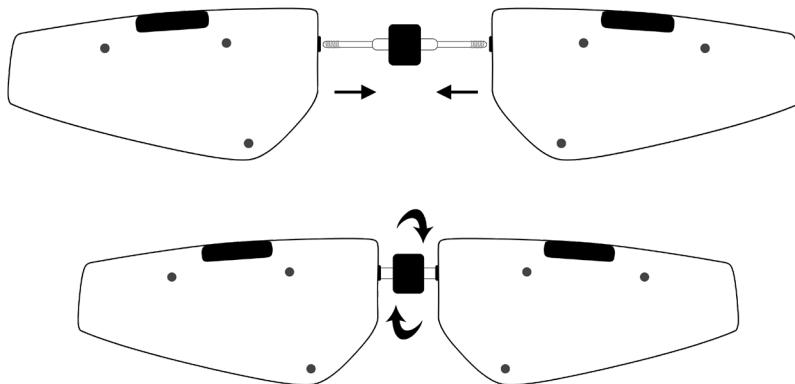
With both wings facing the top side up (rope mounts facing up), simply place the ends of the swivel in each hole of the wings.

These holes have mirrored threads, meaning the swivel only fits one way. Check the inscribed directions on the side of the swivel's rubber grip for which end corresponds to the correct hole (left or right).

Now give the wings a small amount of pressure towards each other while screwing the swivel in the direction of the inscribed arrowheads on the swivel's rubber grip.

Continue screwing until the gap between the rubber grip and wing is about 1/4 Inch or 0,5-1 cm. You should barely be able to touch the metal with your little finger in the gap between the rubber grip and wing.

Note: Check the directions inscribed on the swivel's rubber grip for correct assembly.



Getting in the water

Make sure that the boat's engine is always turned off while someone is entering the water or are close to the engine. Make sure that the rope doesn't tangle around your body while the boat tightens the rope. With the rope tight and your hands firmly on the wings, signal the driver to give a small amount of throttle.

Note: The top side of the Subwing is the side of which the ropes are coming out of the rope connectors.

Tip: For beginners it may be a good idea to start with the Subwing up-side down. This will make it easier to stay on the surface and resurface from a dive, but harder to dive. In addition, the Subwing will not dive on its own when released in speed, but stay on the surface.

When towing the Subwing, there should always be a minimum of two people on the boat:

1. Spotter – a person keeping an eye on the Subwing riders and informs the boat driver on the current status.
2. Boat driver– should be focusing on maneuvering the boat and adjusting the speed according to the spotter's directions.

Hand signals should be used when communicating between the boat and Subwing riders. Make sure that everyone has agreed on hand signals and are familiar with them before anyone gets in the water. An example of hand signals that can be used is thumbs up to go faster, thumbs down to go slower and a flat hand to stop.

Note: The rider, spotter and boat driver should all have fully read the user and safety manual carefully before using the Subwing for the first time.

Note: Even though the Subwing floats, it will dive on its own if released at speed. To prevent damage, stop the boat immediately.

Tow rope

For towing the Subwing, always use a floating rope meant for tubes or other water sports.

Preferably the towing rope should be attached directly at the center of the stern of the boat, as the forces from the rope while towing the Subwing can drastically impair the maneuverability of the boat. This is especially noticeable with smaller boats.

Tip: If your boat doesn't have a rear center mounting point, use a short rope and connect its two ends on either side of the boat with the towing rope tied in the middle. This will center the pulling forces directly behind the boat.

Note: The pulling forces vary while the Subwing rider moves through the water. This can impact the heading of the tow boat.

Speed

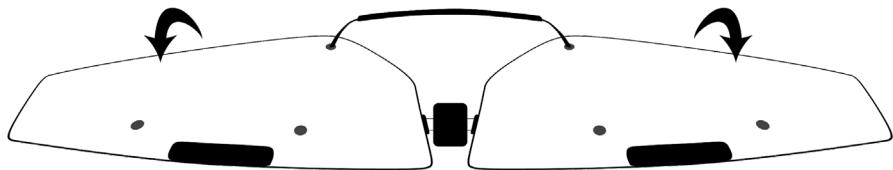
When towing the Subwing for the first time, start with a small amount of throttle, or just idling speed. Let the person in the water familiarize himself of how the Subwing behaves in the water before going any faster. Around 2-4 knots is the recommended towing speed of the Subwing.

Note: Under water, the sense of speed and the forces on the body increases drastically. Take into consideration that a speed around 4 knots is considered fast. Do never attempt higher speeds.

Maneuvering basics

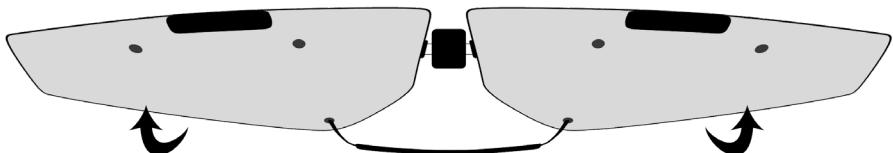
Diving

To dive, simply tilt both of the wings downwards while holding on to the rubber grips. This will change the water flow over the wings similar to a rudder and will make you descend.



Resurfacing

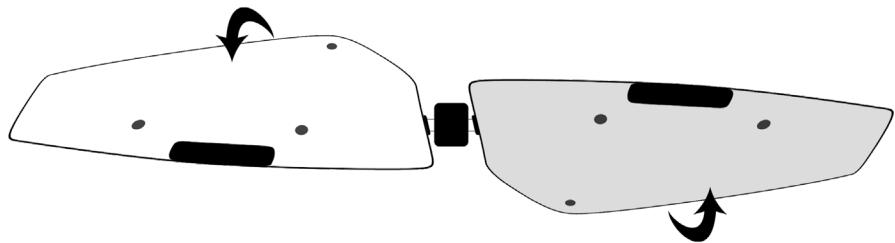
To resurface, simply do the opposite of diving. Point both wings upwards and you will quickly return to the surface.



Barrel rolls

To achieve a successful barre roll, point the wings in opposite directions.

Barrel rolls are usually done while underwater, attempting a roll on the surface leaves one wing in the air giving you a hard time completing a full rotation.



Moving to the sides

Do a partial barrel roll until you are in a sideways position. You can now point the wings in the same direction to move to either sides.

Tip: You can control the downward and upward speed by adjusting the amount of angle you are applying the wings. A bigger angle leads to a more aggressive and fast reaction while a small angle corresponds to a slow and easy response.

Note: Do not attempt barrel rolls, rapid turns or tricks before you are completely familiarized with the basics of resurfacing and diving.

Using the rope grip

The rope grip located at the rear of the Subwing is used whenever one hand is needed. Use it when equalizing ear pressure, when signaling the boat or simply when trying our different riding styles. It can also be used as a carry handle.

Using the rope grip under water can be challenging for beginners and requires some training in order to fully master. Take in account that the Subwing will naturally start diving when holding on to the rope grip under water and transitioning back to the wing grips requires some technique.

Note: The Subwing can spin out of control if one of the wing grips is used separately. Therefore, use the rope grip whenever one hand is needed. This applies especially when under water.

Tip: Experienced riders can maneuver the Subwing from the rope grip by using the entire length of their arms, lowering them to elevate, raising them to decline and twisting them to roll.

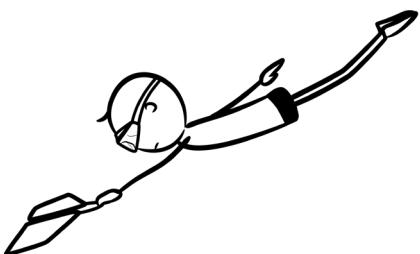
Transitioning from the rope grip back to the wing grips

When transitioning from the rope grip back to the wing grips it's important to get the wings in a neutral or upward position before performing the switch, or else the wings can spin out of control. For this reason, we advise to gain some experience before attempting to use the rope grip.

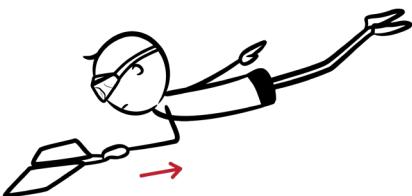
Tip: Check out our Youtube channel for a video tutorial on how to master the rope grip

Follow the steps below in order to prevent the wings from spinning out of control when transitioning from the rope grip back to the wing grips.

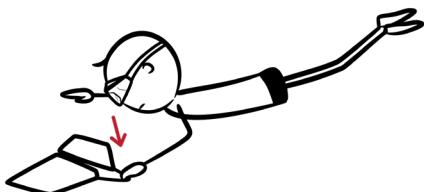
1. Hang by the rope grip to descend and equalize.



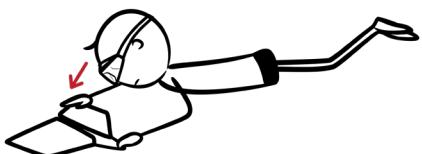
2. When you want to switch to the wing grips, pull the grip close to your chest.



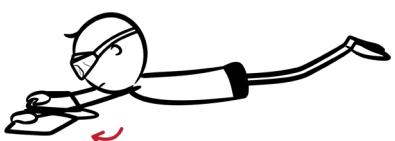
3. Push the rope grip downwards in order to angle the Subwing upwards so the Subwing is no longer pointing in a downwards angle.



4. Do the transition back to the wing grips. Move one hand to the wing grips while maintaining the other around the rope grip.



5. Follow up with the second hand after establishing a firm grip around the wing grip with the first hand.



Care and maintenance

After use

Disassemble the Subwing, rinse all parts in fresh water and allow to dry before storing.

Storage

Always place out of direct sunlight and water when storing.

Damage

If your Subwing gets damaged in any way, let us know and we will replace it if under warranty or provide you with detailed instructions on how to fix it yourself.

Warranty

Subwing guarantees its products against any defects in materials or workmanship from the date of purchase. All products we supply come with a 12 months manufacturer's warranty. If your product breaks down or develops a fault within this period, we will replace it as long as the breakage originates from a manufacturer defect.

If the Subwing has not been used according to the instructions or intentions described in the manual or below, the warranty will not be granted.

Pay special attention to the following scenarios that will make the warranty invalid:

1. Any breakage caused by dropping the Subwing on a hard surface.
2. The operating speed of the Subwing has exceeded 4 knots.
3. Any breakage caused by the Subwing contacting obstacles under/in the water.
4. Any breakage caused by not following the instructions provided in this user/safety manual.

Note: If you experience any problems or faults with your Subwing, please contact us regardless the warranty is valid or no. We may be able to help you anyway. Also, this will help us develop the product further and hopefully prevent any similar problems in future Subwings.

Marine wildlife protection

As our products are tightly connected to the water environment, Subwing is focusing on spreading marine wildlife conservation awareness.

Be aware of the damage you can cause by intervening into the marine wildlife. When using your Subwing, always keep a safe distance to all kinds of marine flora and fauna in order to prevent damaging, disturbing or distressing any kind of marine lifeforms.

Safety notice!

Important! Please read the following information!

Subwing conforms to current standards and is safe to operate if used with caution.

Nevertheless, using the device in an unintended fashion or not following the safety instructions, may lead to injury or death of the Subwing rider and/or other people.

Carefully read all of the information contained in the manual before operating your Subwing for the first time. The information contained in the manual will help you to operate the Subwing safely, protect yourself and others from hazards and prevent damage to the device and property.

Please keep this manual in a safe and easily accessible place for reference whenever needed.

Please pay particular attention to the essential safety information below

- Read the user- and safety manual before first use.
- Be aware that there is always a risk of injury when using the Subwing. Do not use this product if you do not accept taking this risk.
- Only skilled and experienced swimmers aged 16 or older should be allowed to use the Subwing.
- Never use the Subwing with any type of underwater breathing apparatus.
- Using this equipment can increase the risk of shallow water blackout. Never hold your breath for extended periods of time.
- Never use any form of dangerous breathing techniques such as hyperventilating before diving.
- Educate yourself about the dangers of holding your breath underwater before using the Subwing.
- Do not use as swimming aid.
- Wear a certified life jacket at all times.
- Wear body-hugging clothing.
- Use only in sheltered waters.
- Do not operate the Subwing in strong currents, strong wind, bad weather or impaired visibility. Always check the weather forecast before you set out and pay close attention to local weather conditions.
- Do not use in areas occupied by swimmers or divers.
- Maintain great distance to crossing boat traffic.
- Maintain great distance to other people and objects.
- Always have a spotter in addition to the boat driver observing the person in the water.
- Only use with a responsible watercraft operator who knows how to operate a watercraft properly.
- Take all reasonable precautions in the use and operation of your Subwing and boat.
- Check the rope for frays, cuts, sharp edges, knots, or wear before each use. Discard and replace rope if any of such condition occur or if rope appears to be worn.
- Do not add hardware or attachments to the Subwing that are not otherwise supplied by the manufacturer.
- Never use the Subwing while under the influence of alcohol, medication or drugs.
- Take in account that despite every precaution taken, it is still possible for diving goggles to come off during operation of the Subwing and for contact lenses to be lost.

- In most cases, the general personal liability insurance of the user does not cover property damage caused by the use of the Subwing. Before using the Subwing you are encouraged to contact your insurance provider for information on a suitable insurance policy for coverage in cases involving damage.
- Always avoid routes traveled by water crafts such as other boats, jet skis, etc. Take in account the speed at which other water crafts are approaching.
- Be aware of the difficulty to judge the distance of objects under water.
- Before resurfacing, ensure the absence of other swimmers, water crafts or objects above you or approaching you.
- Always keep a safe distance from the bottom which may have sharp rocks or corals that could cause injury.
- You must always ensure that you are able to resurface and return to the shore or boat by yourself without the assistance of the Subwing.
- The rider, spotter and driver must always agree on hand signals in advance.
- Never start accelerating, until the rider signals that he/she is ready.
- Ensure that the tow rope is tight and is not tangled around any parts of your body before starting the boat.
- When the boat engine is running (even in neutral) keep a distance from it, also make sure that the ropes are placed at a distance from the engine. Should the rope become entangled in propeller, immediately shut off the engine and remove ignition key before retrieving the rope.
- Turn the engine off when people are getting into or out of the boat, or are in the water near the boat.
- Never exceed 4 knots when towing the Subwing.
- Be aware of that if the Subwing is released in speed it will force itself down to great depths.

FAILURE TO ADHERE TO THE SAFETY WARNINGS MENTIONED IN THIS MANUAL INCREASES THE POSSIBILITIES OF AN ACCIDENT WHICH MAY LEAD TO INJURY OR DEATH.

The company Subwing cannot take any responsibility what so ever if the Subwing is not being used according to the guidelines and warnings found in the manual/warnings/labels.

Contact info:

Subwing AS
Rigetjoennveien 3,
4626 Kristiansand
Norway

subwing@subwing.com
www.subwing.com