

RACE SERIES USER MANUAL



THANK YOU FOR CHOOSING LEVITAZ.

FOR THE BEST RIDE YOU NEED THE BEST GEAR. EXPERIENCE HIGH PERFORMANCE WITH LEVITAZ, AND FIND OUT HOW A PASSION FOR INNOVATION AND OUR TECHNICAL KNOW-HOW IN THE FOIL INDUSTRY COMBINE TO PRODUCE SUPERIOR EQUIPMENT – DESIGNED TO ENABLE RIDERS TO STEP UP THEIR GAME IN ANY CONDITIONS.

FLY OVER WATER



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1 INTRODUCTION

GENERAL INFORMATION

The Levitaz hydrofoil attaches to the bottom of any kind of watersport board and lifts the board out of the water as it is accelerated by an external force. Because the Levitaz hydrofoil reduces the drag on the board as it moves across the water, a user can often achieve a greater speed. This manual contains important information about the proper use of the product and its safety. Follow these instructions carefully and precisely. This helps to reduce the risk of damage to the product, personal injury or death.

- This manual is part of the product.
- Keep this manual in a safe place for the entire life of the product.
- If the product is transferred to a new owner, this manual and all associated documents must be passed on to the new owner.

The meaning and appearance of safety symbols used in this manual are as follows:



The text after the signal word "WARNING!" contains important information, which must be followed to avoid serious personal injury or death.

NOTICE!

The text after the signal word "NOTICE!" contains information, which must be followed to avoid damage to the product.

Use of this product and any of its components, as well as hydrofoiling in any type of water sports involves certain inherent risks, dangers and hazards. Even if all the following instructions are followed, the risk of serious injury or death to you or others will not be eliminated. Levitaz, a brand of Geislinger GmbH or any of its agents shall not be liable for any loss, cost, claim, damage, demand or expense you may suffer whatsoever arising as a result of your actions when using the product.

2 WARNING AND SAFETY PRECAUTIONS



Hydrofoiling in any kind of water sports is inherently a dangerous activity that can result in serious injury or death to the user or people in the proximity of the user, with or without a Levitaz product. These risks include drowning or being hit by the product if the user loses control of it. The product may increase the risk of some injuries to users or bystanders by adding additional structure to the board that may strike users or bystanders; by increasing the speed at which the board can be operated, or by changing the manner in which an out-of-control board reacts as it contacts water or ground during an out-of-control situation. The user of this product should understand that the use and participation in the sport and any foiling activity could cause injury or death to you and/or others around you.

OBSERVE THE FOLLOWING SAFTY STANDARDS WHENEVER USING THIS PRODUCT:

- Hydrofoiling and kite boarding are dangerous sports.
- Use of this product exposes the user to unexpected and unavoidable risks, dangers and hazards.
- Read the manual for important information about the installation, care and maintenance of the board before use.
- Always use extreme caution when using this product.
- Never use this product unless you are in good physical health.
- Never use this product unless you are an experienced swimmer.
- Never act in a careless manner when using this product.
- We do not recommend hydrofoiling in breaking surf.
- Always observe local rules and regulations when using this product.
- Always wear an approved life and protection vest.
- Always wear a suitable helmet.
- This product is designed for use on water only.
- Make sure you take lessons before using this product on the water. Never use this product in conditions that are above your ability level.
- Surf under control and do not use at speeds that exceed the skills of the rider.



- Never use this product in shallow water or near the shore, or near docks, pylons, swimmers or other activities.
- Do not use this product in thunderstorm and/or lightning conditions.
- The users are responsible for their safety and the safety of those around them.
- Components in this product are subject to the random forces of natural elements and are subject to irregular wear.
- Only use original Levitaz replacement parts.
- It is the user's responsibility to inspect equipment for wear before every use.
- It is the user's responsibility to repair and maintain this product.
- The use of damaged products is not allowed.
- Before riding ensure that the bolts are tightened with the tightening torque that is described in this manual.
- Geislinger GmbH is not responsible for injuries, death or damage to the product due to misuse or any use not consistent with these instructions.
- Do not use this product under the influence of alcohol, drugs or medications.
- Minimum age of rider: 18 years.
- At temperatures above ≥ 650 °C (1200 °F), decomposition of the carbon fiber can cause respirable fiber particles (WHO-fibers). Do not inhale combustion gases.

Failure to follow these instructions may increase the risk of serious personal injury or death, damage to the product or both.

4 HYDROFOIL ATTACHMENT AND TECHNICAL DATA

The product will only function properly if it has been mounted according to the instructions contained in this manual. Carefully follow these instructions.



This product is designed for use on water and by trained personnel (over 18 years) only.

Failure to do so may cause serious personal injury or death, damage to the product or both.

NOTICE!

Do not use power tools for the assembly or disassembly process. This may cause serious damage to the product as control of torque and power is limited. Doing so will render your warranty void.

NOTICE!

Over tightening screws can cause irreversible damage to the inserts. Doing so will render your warranty void.

NOTICE!

Use the tools provided in the scope of delivery. Using the wrong tool will damage the screw heads and threads and create sharp edges that will cause harm.



NOTICE!

EN The surface of the Hydrofoil is finished with 1K Primer Filler – Primer Shade. Therefore, you must not use highly concentrated alcohol or Acetone for cleaning. We recommend using silicon remover or soapy water for cleaning/degreasing the surface. It can be applied by lint-free wipe or sponge.

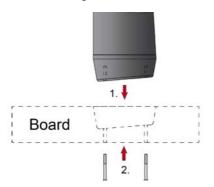
FR La surface du foil est traitée avec un 1K Primer Filler - Primer Shade. Pour cette raison, il est absolument déconseillé d'utiliser des produits de nettoyage à haute concentration d'alcool ou du type Acétone. Nous vous recommandons l'utilisation d'eau savonneuse ou d'un nettoyant antisilicone pour nettoyer/dégraisser les surfaces. Ceux-ci peuvent être appliqués avec une linguette sans peluches ou une éponge.

DE Die Oberfläche des Hydrofoils wurde mit einem 1K Primer Filler - Primer Shade behandelt. Vermeiden Sie unbedingt das Reinigen der Oberflächen mit hoch konzentriertem Alkohol oder Acetone. Wir empfehlen die Nutzung von Silikonreiniger oder einfachem Seifenwasser zur Reinigung/Entfettung. Nutzen Sie dazu einen Schwamm oder ein fusselfreies Wischtuch.

4.1 ATTACHING YOUR LEVITAZ RACE SERIES FOIL TO YOUR FOIL BOARD WITH TUTTLE BOX

The Levitaz Race Series hydrofoils can be used, depending your ordered configuration, with boards that have a tuttle box or plate mount with US tracks. The tuttle box is not standardized. Please check always dimensions. See 4.2.

The connection bolts between the hydrofoil and the board are not delivered within the scope of delivery of the hydrofoil by Levitaz because their lenght depends on the boards shape (thickness in box area). Please make sure to use stainless M6 bolts provided with a minimum strength class 70.



Adjust the brass cylinder head screws in the mast to the appropriate position for securing the mast and foot straps. FOTO

Note that the inclined surfaces from the mast and the tuttle box fit together and are clean of any objects like dirt or sand prior to the assembly.

Before proceeding, apply a small amount of the Loctite grease provided in the Tool kit onto the threads and undersides of the heads on the two screws (Note: screws are not included).



The leading edge of the mast should be pointing towards the nose of the board.

Insert the mast into the Tuttle box.

TIP: If you keep the mast cover on you can prevent damage or contamination (e.g., grease) on the surface.

Ensure that the mast is inserted evenly, with equal depth at both the front and back. There should be a small, even gap at the front and rear.

The transition from the mast box section to the mast profile section should be parallel to the underside of the board and perpendicular to the board's surface. FOTO







The transition from the mast box section to the mast profile section should be parallel to the underside of the board and perpendicular to the board's surface.

When the mast has entered approximatelly 95% into its final position, you are ready to flip the board.

Insert the screws through the deck into the brass nuts in the mast. Carefully screw them in clockwise, ensuring they are correctly aligned and not crooked. The screws should turn easily with minimal force. Do not force the screws; if resistance is encountered, stop and realign the brass nuts. If a screw does not easily thread in, remove the mast and realign the brass nuts precisely.

Gradually tighten the front and rear screws alternately until the mast is securely positioned in the Tuttle box. After the mast is in place, secure the front foot strap screw into the mast following the same procedure as above.

Re-tighten the bolts after a few minutes of riding, as the mast will have found its final position inside the tuttle box. (Tightening torque 9 +/- 1 Nm)

NOTICE!

If any brass nut is damaged, such as from misaligned screw insertion, replace it before proceeding.

NOTICE!

Ensure that you tighten the bolts in an alternating sequence until the foil system is fully secured and the bolts are firmly tight. Tightening with the wrong sequence or wrong tightening torque will damage the boards deck laminate, tuttle box, mast inserts and create sharp edges that will cause harm.

4.2 LEVITAZ TUTTLE BOX TECHNICAL DATA

Side view R6.35 R6.35 R6.35 R6.35 R6.35

Top view

4x R6.35

5x Inserts for M6

156 mm



4.3 ATTACHING YOUR LEVITAZ FOIL TO YOUR FOIL BOARD WITH SLIDING TRACK SYSTEM

The Levitaz Race Series hydrofoils can be used, depending your ordered configuration, with boards that have a tuttle box or plate mount with US tracks.

The connection bolts between the hydrofoil and the board are not delivered within the scope of delivery of the hydrofoil by Levitaz.

Please make sure to use stainless M8 bolts provided with a minimum strength class 70.

The Levitaz Race Series plate masts have a industry-standard 165 x 90 mm bolt pattern to attach the foil system to the board.

It is very likely that other board systems on the market will be compatible with your Levitaz Race Series hydrofoil. However no guarantees can be given. For best results, we recommend using your Levitaz Race Series Hydrofoil System with a Levitaz Foil Board.

For detailed attachment instruction for the Race Series hydrofoil with plate mast please check Levitaz Board Instalation Guide and Manual. Available for download under https://levitaz.com/download.

NOTICE!

Ensure that you tighten the bolts in a diagonal sequence until the foil system is fully secured and the bolts are firmly tight. Tightening with the wrong sequence or wrong tightening torque will damage the threads, tracks or/and the plate mount and create sharp edges that will cause harm.

4.4 HYDROFOIL DESCRIPTION

The standard Race Series hydrofoil set consists of 5 parts: The Mast (1), the Front Wing (2), the Rear Wing (3), the Screw Kit and the Tool Kit.





5 HYDROFOIL ASSEMBLY INSTRUCTIONS

The product will only function properly if it has been mounted according to the instructions contained in this manual. Carefully follow these instructions.



The components of the Levitaz hydrofoil can have sharp edges.

For users and any other personnel involved there is a danger of injury while the components are being assembled and while the Levitaz hydrofoil is in use.

NOTICE!

Do not use power tools, hammer or any sharp objects for the assembly or disassembly process. This may cause serious damage to the product. Doing so will render your warranty void.

NOTICE!

Ensure that all surfaces are free from dirt or sand prior to the assembly. This is particularly important when assembling the glider onto the mast.

NOTICE!

Grease the threads of the screws supplied in the Screw kit properly using the anti-seize grease provided in the Tool kit.

NOTICE!

Over tightening screws can cause irreversible damage to the inserts. Doing so will render your warranty void.

NOTICE!

Use the tools provided in the scope of delivery. Using the wrong tool will damage the screw heads and threads and create sharp edges that will cause harm.



5.1 CONNECTION OF YOUR LEVITAZ RACE SERIES GLIDER



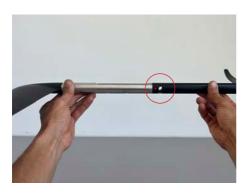
Notice the correct position for the front wing and the rear wing (red dot marking for "Port" side).

Orientation of the rear wing: Wing tips bend toward the mast (box side).

The threaded pins in the front wings' stainless steel part are pre-greased and pre-mounted. Make sure that these pins are leveled with the steel surface and do not protrude.



Connect the rear wing and the front wing by simply plugging the parts together.



Make sure that the holes of the stainless steel part and rear wing are in exact alignment.



Insert the crossway bolt according to the correct surface curvature.

Use the red mark as orientation to insert the bolt from "Port" side.



Check with your fingertips the correct surface curvature.



Now use the M6x30 screw supplied in the screw kit. Before proceeding, apply a small amount of the anti-seize grease provided in the tool kit onto the thread and underside of the head. Connect the front wing to the rear wing using the greased screw. Tighten the screw to 9 ±1 Nm tightening torque using the Torx TX30 tool provided in the tool kit until the rear wing is fully secured and the screw is tight.



NOTICE!

Do not overtighten screws as they are subject to extreme loads.

Screw tightness should be checked regularly.

5.2 CONNECTION OF YOUR LEVITAZ RACE SERIES MAST AND GLIDER

NOTICE!

Ensure that the mast box, mast threads and frontwing box are free from dirt or sand prior to the assembly. While transporting the mast disassembled always keep the screws screwed in the threads to avoid dirt or sand to enter.



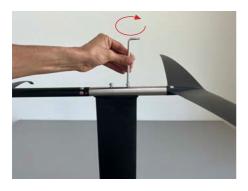
Remove the pre-mounted and pre-greased screws from the mast. Position the glider onto the bottom of the mast whilst ensuring the correct position is maintained.

Tip: If you first mount the mast to your board, you can ensure a safe and secure positioning. See chapter 4.



Make sure that the holes of the steel part and mast are in exact alignment.

Next, grease the threads of the screws M6x60 supplied in the screw kit properly (apply a small amount onto the threads and undersides of the heads) using the anti-seize grease (provided in the tool kit.



Due to the tapered design of the box connection between the glider and the mast, it is very important that you carefully tighten each of the greased screws evenly (matching turns of each screw at a time).

If you tighten one screw significantly more than the other, the glider could locate unevenly and damage the box connection.



Tighten the screws to 9 ±1 Nm tightening torque using the Torx TX30 tool provided in the tool kit until the glider is fully secured and the screws are tight.

Tip: Move the glider left and right by pushing the front wing on the left and right side. Re-tighten the screws to 9 ±1 Nm tightening torque.

Tip: After a first quick session on the water the screws should be checked again and retightened if needed to $9 \pm 1 \text{ Nm}$ tightening torque.

Tip: The red dot markings shall help for initial assembly and could be removed to avoid ventilation issues.

NOTICE!

Do not overtighten screws as they are subject to extreme loads.

Screw tightness should be checked regularly.



5.3 ADJUSTMENT OF THE REAR WING'S ANGLE OF ATTACK



In order to adjust the desired angle of attack use the Inbus 3,0 mm tool provided in the tool kit.

Both threaded pins are pre-greased and pre-mounted.



The two threaded pins adjust the angle of attack. To adjust the front foot pressure, follow these instructions:

- Turn the lower screw (bottom side) clockwise to increase front foot pressure.
- Turn the upper screw (box side) to reduce front foot pressure.
- It takes two to three turns to adjust the desired angle.
- It is recommended to lock both screws to ensure maximum safety.

NOTICE!

Ensure that the threaded pins for angle adjustment are always leveled with the steel surface and do not protrude. Make sure that they are always greased and free from dirt or sand prior to the assembly.

5.4 FINAL CONTROL OF THE CORRECT ASSEMBLY

Check your hydrofoil prior to each use. Ensure that the screws are tight and there are no cracks, holes or scratches which could compromise your Foil System's structure.



The components of the Levitaz hydrofoil can have sharp edges.

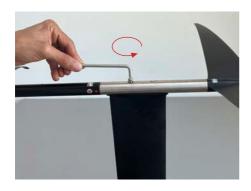
For users and any other personnel involved there is a danger of injury while the components are being assembled and while the Levitaz hydrofoil is in use.

NOTICE!

Do not use power tools, hammer or any sharp objects for the assembly or disassembly process. This may cause serious damage to the product. Doing so will render your warranty void.



5.5 DISMOUNTING YOUR LEVITAZ RACE SERIES MAST AND GLIDER



Remove the two screws M6x60 using the Torx TX30 tool provided in the tool kit.



Pull the glider off the bottom of the mast.

Tip: If you leave the hydrofoil mounted onto your board, you can ensure a safe and secure positioning.

Tip: Gently tapping by hand against the frontwing (direction away from mast, frontwing in its cover) will help you to pull the glider off.

Tip: Insert the M6x60 screws again in the mast threads to avoid sand or dirt entering the mast threads.

5.6 DISASSEMBLY OF YOUR LEVITAZ RACE SERIES GLIDER

NOTICE!

Ensure that the threaded pins for angle adjustment are always loosened prior to the disassembly of your glider.



Use the Inbus 3,0 mm tool provided in the tool kit to loosen the 2 threaded pins for angle adjustment.

Make sure that these pins are leveled with the steel surface and do not protrude.



Remove the M6x30 screw using the Torx TX30 tool provided in the tool kit.





Before pulling out the rear wing remove the crossway bolt by pushing against the bolt with your finger and then pull it out.

Tip: If the bolt is stuck use a stick with a smooth surface to avoid mechanical damage to the metallic crossway bolt.



Hold the front wing and pull out the rearwing.

6 MAINTENANCE AND CARE

- Clean all hydrofoil parts with fresh water after every use and dry the parts. Do not
 use alcohol or acetone, this will cause serious damage to the surface finish.
- To prevent oxidation of the screws and threads, we strongly recommend that before reassembling use re-greased screws (as per the assembly instructions).
- Check your hydrofoil prior to each use. Ensure that the screws are tight and there are no cracks, holes or scratches which could compromise your Foil System's structure.
- Do not overtighten screws as they are subject to extreme loads. Screw tightness should be checked regularly.
- Always store the disassembled product in suitable covers and a durable carrier bag for optimal protection. This is to prevent unnecessary sun exposure, exposure to hot temperatures, scratches and other wear and tear.
- Do not place heavy parts on top of the product.
- Do not leave or store the product in cars when it is hot outside.
- Protect the product from direct sunlight or heat.

Storage Temperatures:

NOT PERMITTED	OPTIMAL	PERMITTED UP TO	NOT PERMITTED
<-30 °C (-22°F)	-10°C - +25°C (+14°F - +77°F)	+80°C (+176°F)	> +80°C (+176°F)

NOTICE!	Failure to do so may cause serious damage to the product and void the warranty.



7 REPAIR INFORMATION

Always check your hydrofoil prior to each use. Ensure that the screws are tight and there are no cracks, holes or scratches which could compromise your Foil System's structure.

INSPECTED CONDITION	CORRECTIVE MEASURE
Visible fiber failure or any other heavy damage like delamination (separation of the single layers of the composite).	DO NOT REPAIR the reinforced plastic components! Dismantle the product and send it back to Levitaz.
It is not clear if the damage is critical or not.	Take a photo, document the extent of the damage and contact Levitaz for advice.

If any other damage or wear to the product is identified but not described in this table, contact Levitaz to identify the appropriate corrective measure. See https://levitaz.com/contact

8 PACKAGING AND DISPOSING OF USED PARTS

All parts are packed in a cardboard box.

- Take the parts out of the box.
- Remove the packing protection from the product parts.
- Check the product parts for the completeness of its scope of delivery.
- Check the product parts for possible damage that may have occurred during transportation.
- The cardboard box and PE film can be recycled.

After replacing individual components:

- All metal parts can be recycled (scrap metal).
- All old fiber reinforced plastic parts must be disposed of as residual waste.

Federal, state and local regulations must always be observed when disposing of the product or parts thereof.

9 REPLACEMENT PARTS

Keep the parts' bar code label and invoice with this manual. This will help to speed up your order for replacement parts or any possible troubleshooting.

NOTICE!

Use only original Levitaz replacement parts.

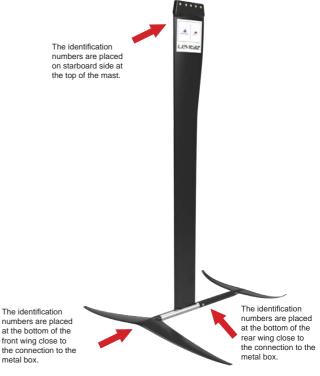
Failure to do so may cause serious damage to the product and void the warranty.

10 SERIAL NUMBER

Each main component has an indentification number of the model and an unique identifier number, the serial number.

The model identification is always starting with "G" followed by 6 digits. (Gxxxxxx)

The unique identifier number, the serial number, has 8 digits. (1xxxxxxx)





11 WARRANTY POLICY

Levitaz warrants this product to be free from major defects — in material or work-manship — to the consumer, as defined by the EU Consumer Protection Act for a period of 24 months within the EU and six months outside the EU. If the customer is a company, it must inspect the goods provided immediately for non-conformances in quality and defects and must notify us in writing within two weeks from receipt of the goods; otherwise, assertion of warranty claims is excluded. To meet the deadline, the notice must be sent on time. This warranty is subject to the following limitations:

The warranty is valid only when this product is used for normal recreational activities and does not cover products used in rental or teaching operations.

As a high-performance racing product, this equipment is subject to rigorous use that may lead to accelerated wear and potential damage beyond what is covered by this warranty. Extreme stress or impacts associated with competitive racing conditions can exceed the normal usage parameters, and such damages are not covered by this warranty.

The product is designed for a lifespan of up to a maximum of 2000 operating hours. This means that the material and workmanship of the product are intended to withstand normal usage for up to 2000 hours of operation. After this period, normal material fatigue may occur, which is not considered a defect in materials or workmanship and is thus not covered by the warranty. Over time and with use, the materials used in this product, including carbon, may experience material fatigue due to static or dynamic stresses. Environmental factors such as UV exposure, temperature fluctuations, and moisture can also accelerate aging and affect the lifespan of materials. Any defects or malfunctions that occur after the product has been used for 2000 hours may be considered a result of normal wear and tear, and not a defect in materials or workmanship.

Levitaz will make the final warranty determination, which may require inspection and/or photos of the equipment, which clearly show the defect(s). If necessary, this information must be sent to the Levitaz head office or official distributor in your country – postage prepaid. Product may be returned only if a return authorization is given in advance by the Levitaz head office or official distributor.

If a product is deemed to be defective by Levitaz, the warranty covers the repair or replacement of the defective product only. Levitaz will not be responsible for any costs, losses or damages incurred as a result of loss of use of this product.

The warranty does not cover damage caused by misuse, abuse, neglect, or normal wear and tear including, but not limited to: punctures, rigging with other than Levitaz components, damage due to excessive sun exposure or damage caused by improper handling and storage, damage caused by use in waves or shore break, or damage caused by crashing the foil at high speed. Additionally, impacts resulting from racing conditions, such as those during competitive events, may cause accelerated wear or sudden failures. Such conditions exceed normal usage parameters and are not covered by this warranty. Carbon fiber composites are sensitive to sudden impacts, such as those occurring during hard landings or crashes. Such impacts can cause damage that is not immediately visible but may lead to structural weaknesses that manifest as noticeable damage or fractures during later use. These types of damage resulting from sudden, excessive stress or impact are not covered by this warranty.

Regular inspections and proper maintenance can help detect and prevent such issues early. We recommend following the care instructions provided to maximize the product's lifespan.

This warranty is void if any unauthorized repair, change or modification has been made to any part of the equipment. The warranty for any repaired or replaced equipment is good from the date of the original purchase only. The original purchase receipt must accompany all warranty claims. The name of the retailer and date of purchase must be clear and legible. A claim form can be downloaded from levitaz.com.

There are no warranties which extend beyond the warranty specified herein.





FLY OVER WATER

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