

### Acknowledgement

Thanks for choosing RemigoOne electric outboard. Probably the last small outboard you will ever buy. We will do our best to make boating for you as easy as possible. We are dedicated to provide ultimate user experience. High-performance technology, durable construction and reliable lithium batteries are just a part of that. Forget about the motor and enjoy your time on water!

You are most welcome to contact us > https://remigo.eu/ info@remigo.eu +386 41 769 489

### **Using This Manual**

Before use of the product, please read this user manual thoroughly to understand the correct and safe operations. By using this product, you hereby agree that you have fully read and understood all contents of this manual. Remigo accepts no liability for any damage or injury caused by operations that contradict this manual.

Due to ongoing optimization of our products, Remigo reserves the rights of constantly adjusting the contents described in the manual. Remigo also reserves the intellectual property rights and industrial property rights including copyrights, patents, logos and designs, etc. This manual is subject to update without prior notice, please visit our website www.remigo.eu for the latest version. If you find any discrepancy between your products and this manual, or should you have any doubts concerning the product or the manual, please visit www.remigo.eu.

Remigo reserves the rights of final interpretation of this manual.

### **Product Overview**

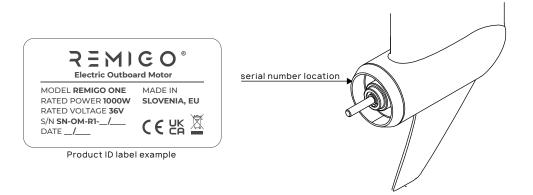
RemigoOne is an integrated electric outboard with all for operation required components seamlessly integrated in an unibody aluminium housing. It is engineered to maximise efficiency and designed to maximise ease of use. RemigoOne has thrust of 30 kg that is comparable to a 3 HP gasoline outboard.

RemigoOne can be used on all types of boats up to 1500 kg; tenders, dinghies and sailboats. With stepless adjustable mounting height between 15in and 30in (extra short to extra long equivalent) the same unit can be adjusted to any type of vessel. No more need for "long" or "short" shaft version of the same product. It is intuitive to operate, easy to carry and store.

Unpack the package and check if there is any damage caused during transport. Check all the items inside the package against the below list. If there is any transport damage or lack of any listed item, please contact Remigo or your dealer immediately.

### Product Identification

Serial number is engraved on the motor cover near propeller and on product ID label. Please note the position of the serial number and record it for access to warranty service and other after-sale services.

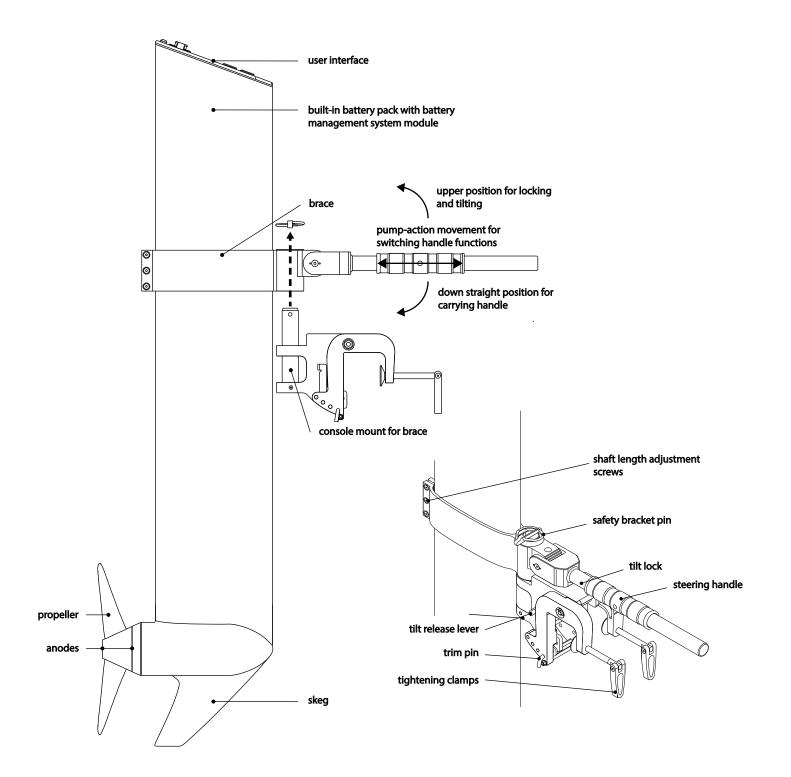


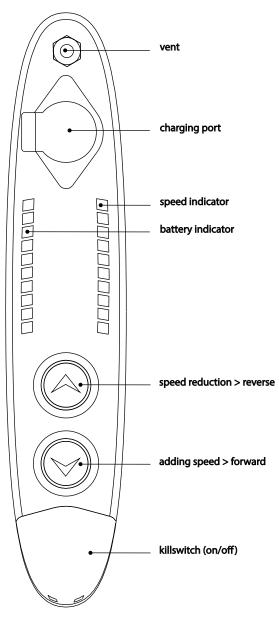
### Items Qty.

RemigoOne outboard unit - 1 pcs Mounting bracket - 1 pcs Standard charger 5A - 1 pcs Magnetic killswitch - 2 pcs Set of tools for propeller and height adjustment - 1 pcs User Manual, Warranty Card - 1 pcs

Save original package for the outboard storage.

Other accessories mentioned in this user manual need to be purchased separately.





# RemigoOne technical data sheet

input power in watts	1000
motor type	brushless DC
static thrust in kg	30
comparable petrol outboard	3 HP
battery	integrated 1085 Wh Li-Ion
nominal voltage	36 V
final charging voltage	42 V
charging time 100 - 240 V	6h (standard charger - included)
charging time 100 - 240 V	3h (fast charger - optional)
charging time 12 - 24V	10 - 12h (DC charger - optional)
total weight in kg (bracket included)	14.5
shaft length	stepless adjustment up to 800 mm / 15-30 inch eq.
maximum propeller speed in rpm	1000
control	smart 2-button control
steering	lockable
tilting	manual with grounding protection
trim	manual, 4 positions
reverse	yes
dimensions h x w x d	1250 mm x 295 mm x 90 mm



### Important safety notes before start

Charge RemigoOne battery with official Remigo chargers only. Consequences of mixed use are at your charge.

For safety reasons, please read the following instructions and notes before using this product. By using this product you hereby:

- 1 agree to these notes and instructions;
- 2 agree not to use this product for purposes that infringe upon or contravene laws and regulations;
- 3 agree to be responsible for your own conduct while operating this product.

### **Outboard** motor

- Only allow adults who have thorough understanding of this manual to operate this
  product.
- Always have paddles on board for additional safety.
- Familiarize yourself with all the outboard operations, including start/stop, steering and tilting.
- Check the status of the outboard and battery level before each trip.
- Follow the boat manufacturer's instructions on the maximum allowed outboard power
  of your boat, do not overload the boat or the outboard.
- Only run the outboard while the propeller is under water.
- Stop the outboard immediately if someone falls overboard.
- Do not leave the outboard in the water while the boat speed exceeds 15 NM.
- Tilt up the outboard above water for a longer period of not using it.
- Wash the outboard with fresh water before storing it for a longer period.
- Do not start the outboard in shallow or unknown water conditions. Only use the outboard in deep water area.
- If an error occurs and the outboard malfunctions, please remove killswitch and wait for one minute before setting it back on.
- For range extension and protection considerations, the motor maximum power will decrease to 70% when last 20% of battery charge is reached.
- When the battery voltage drops below the critical level RemigoOne will shut down automatically.
- With very low level of battery charge the range may extend considerably if motor is used in low power.
- To keep electric connector in good condition, please spray the connector once a year with contact spray.
- The killswitch has magnetic field, keep it 50cm/20inch away from pacemakers and other medical implants.
- The magnetic field of killswitch may interfere with compass or some electronic instruments, keep it away from these instruments.
- Keep the kill switch 50cm/20inch away from magnetic cards (e.g. credit cards) and other magnetic media.

# Battery

- Take battery safety seriously. Follow battery instructions, avoid short-circuit, overheat, overcharge and over-discharge.
- Operating temperature: -30°C to 50°C
- Charging temperature: 0°C to 47°C
- RemigoOne can only be charged with an RemigoOne original charger.
- RemigoOne has a built-in battery management system which provides cell balancing function, over charging protection, over discharging protection, short-circuit protection, over temperature protection, under temperature protection, over current protection, communication function, etc.
- Do not drop, strike or poke RemigoOne with sharp object.
- Do not disassemble RemigoOne or conduct unauthorized repair, the battery disassembly can only be conducted by Remigo service.
- Never charge a broken or damaged RemigoOne unit.
  - Do not charge the battery near flammable materials.
- For cell balancing leave the charger connected for at least 12 hours at least every 2 months.
- Disconnect the charger when not in use for extended period of time.
- Though RemigoOne top cover is IP67 waterproof, it's suggested not to immerse it in water completely or store the unit in moist environment.
- Keep conductive objects away from the charging port to avoid damage of electronic components.
- Use the port cap to avoid accidental short-circuit.
- Charge the battery immediately after full discharge.
- For long time storage, ensure the battery charge level is around 60%, store the unit in 15°C to 25°C ambient temperature.
- If battery level is low for a long time, it will enter sleep mode. Charge to wake it up.
- During long time storage, activate the battery every 3 months by a charge condition and keep the battery charge level at 60% around. This activation is very important and it can help to keep the battery in good health.
- After long time storage, fully charge the battery before use
- It is okay to leave the unit exposed to direct sunlight on hot days, but it must not be covered. White color and thermo conducting design help RemigoOne retain cool temperature in any normal weather condition
- Do not leave the unit in a hot or pressurized container, such as trunk of the vehicle on hot days.
- Never dispose RemigoOne battery as general household waste or in fire.

### Installation

- 1. First install the bracket only separate it from the outboard
- 2. Mount the bracket on the transom of the boat and tighten the two tightening clamps. (Transom Thickness Range: 15mm~64mm)
- Adjust trim angle of the moiunting bracket so that circular console mount is in vertical position.
- 4. With the "pump-action pull" put the steering handle on the unit in upward position.
- 5. Hold RemigoOne with both hands and carefully mount it on the console.
- 6. Insert the safety ring into the opening on top of the circular console mount to prevent separation of the motor and the mounting bracket.
- 7. With the "pump-action pull" put the steering handle on RemigoOne in horizontal position to enable steering.
- 8. Steering handle in upward position locks the outboard in center. Use this position for tilting the outboard out of the water or when steering with another (primary) rudder.
- 9. For carrying RemigoOne put the steering handle in downward position
- 10. Ensure the outboard is firmly fixed as loosened clamp screws may cause the outboard to fall into water or get damaged.
- 11. Check the screws and tightening clamps every time before use since they may be loosened because of mechanical vibrations.
- 12. A rope is recommended to be used to avoid loss of your outboard in case it falls off the transom. Use the rope to connect your outboard and a secure mounting point on the boat.
- 13. The mounting height of the outboard affects the running speed seriously. When the mounting height is too high, cavitation may occur to waste power. When the mounting height is too low, the water resistance will increase and it will lead to running speed loss.
- 14. Adjust mounting height according to your transom height and applications. The optimum mounting height is affected by the conditions of boat and requirements. It's recommended to test running the outboard at a different mounting heights to find the optimummounting height and thus the outboard's performance.

CAUTION: When RemigoOne is assembled with bracket and in use, make sure to use safety ring on console mount to prevent bracket falling in the water.

# Trim Angle Adjusting

- 1. RemigoOne has four trim angle options including 21°, 14°, 7° and 0°.
- The trim angle should be adjusted according to the boat type and the running speed to achieve higher efficiency. It is recommended to try different trim angles at your desired running speed to achieve the best performance.
- 3. Only adjust the trim angle when the outboard is stopped.
- 4. Never toggle the Tilt Release Lever if the propeller is rotating.
- 5. Pull the Tilt Release Lever up and tilt up the outboard.
- 6. Remove the safety ring on the trim pin and then pull the trim pin out.
- Select a desired trim angle and insert the trim pin into the corresponding position, attach the safety ring to fix the trim pin.
- 8. Put RemigoOne, back in vertical/operating position.

### Adjusting shaft length

- Unscrew security bolts on three screws on the back of the brace that holds motor in position.
- 2. Unscrew the three screws completely.
- 3. Insert the divider wedge in the brace to widen it.
- 4. Gently move the brace to a desired position.
- 5. Remove the divider wedge so the brace will close
- 6. Insert and tighten the three screws. Each screw should be retightened at least 3 times to secure a tight grip.
- 7. Screw on security bolts and tighten them.
- 8. Before turning on the engine check if the depth of propeller is correct and it turns freely when the outboard is positioned sideways not to hit the boat.

### Operation

- 1. Ensure RemigoOne is correctly and firmly installed on the boat.
- 2. To turn it on, put the magnetic killswitch on its designated position on bottom of the unit's interface and attach the other end of the killswitch cord to your wrist or life vest.
- 3. Check and ensure the battery has enough power and plan your trip accordingly.
- 4. Wait for 3 seconds before operation. When both stop blinking and start to show actual data, you can set RemigoOne in operation.
- 5. To start the motor press the button that shows the desired direction.
- 6. Press the button again to increase power (10 steps available).
- 7. To decrease power, press the other button as many times as desired.
- 8. Hold the button pressed to faster increase/decrease the speed.
- 9. Press both buttons at the same time to stop the motor instantly, at any speed.
- 10. In case of emergency stop pull the killswitch/key off the interface.
- 11. Tilt the outboard out of water and uninstall it from mounting bracket according to your requirement.

# Tilting up the Outboard Motor

- Put the steering handle in upwards position and ensure the outboard is locked in straight position. Note that locking pin in steering handle facing upward will lock only in fully central position.
- 2. Press the Tilt Release Lever, then pull the steering handle until the outboard tilts out of the water and Tilt Lock Lever jumps in locked position.
- 3. Hold the steering handle and press the Tilt Lock Lever to release the outboard from tilted position back to vertical. Lay down the outboard gently to the original position in the water.
- 4. Never toggle the Tilt Release Lever when the propeller is rotating.

CAUTION: Make sure Tilt Release Lever is in locked position before setting the outboard in reverse (backward motion).

### Indicators

- 1. There are two indicators consisting of 10 LED (10 steps) on user interface.
- 2. Left one (green): State of Charge indicating approximate battery level. The solid blocks stand for remaining battery. LED will change from green to orange when 50% is reached and to red when last 20% of battery power is reached.
- Right one (blue): Power indicating level of power in use. When moving forward, indica tor LEDs will start to light up from bottom to top. When moving in reverse/backward motion, LEDs will also start to light up in reverse positions; from top to bottom.



Power indicator while driving forward (L) and reverse (R)

# Charging

- 1. Charge the battery when the state of charge level is low or empty.
- 2. Power off the outboard by removing the killswitch.
- 3. It's recommended to charge the battery after turning off the outboard though it's allowed to operate and charge the outboard simultaneously.
- 4. Connect the charger cable to the connector on top of interface and connect to the AC power plug of the charger to the 100V~240V wall outlet.
- 5. While charging you can check the state of charge by turning the outboard on with the key/killswitch.
- 6. When charging, LED indicator on RemigoOne charger is red.
- 7. When battery is fully charged, LED indicator on charger is green.
- Disconnect the charger cable.
- 9. It is okay to leave the outboard connected to the charger for a couple of days or so. However do not leave charger on gor a longer period as it may affect the performance of the battery.

# **Propeller Assembly**

The propeller is assembled on the outboard. Before use always quick check the propeller. If it gets damaged and you need to change it, please follow these instructions:

- Remove the shaft anode.
- Remove the bolt and washer.
- 3. Remove propeller by pulling it off the shaft.
- 4. Check the pin in the hole on motor shaft, and change it if damaged.
- 5. Attach the new propeller.
- 6. Tighten the hex locknut with 17mm socket wrench.
- 7. Attach the shaft anode back in position.

### Maintenance

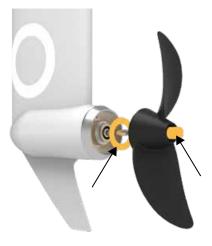
- 1. Conduct the maintenance under these instructions or your dealer.
- 2. Use only RemigoOne original components for replacement and maintenance.
- 3. Ensure the key is disconnected before each maintenance check, to prevent injuries due to rotating propeller.
- 4. Check the propeller blades for wear and other damage.
- 5. Check the pin on motor shaft for wear and damage.
- 6. Check regularly if anything is twisted around the propeller. (seaweed, fishing net ...)

# Replacing the Anodes

There are 3 anodes on RemigoOne:

- 1. Shaft anode located next to propeller bolt.
- 2. Housing anode located behind the propeller.
- Mounting bracket anode located on the bottom side of the mounting console (bracket)
- 4. Check anodes regularly and replace them once a year if necessary.





Locations of anodes

### Transportation and Storage

- 1. For long distance transport, please use the original package to pack the outboard before transportation.
- 1000Wh Li-lon batteries (like in RemigoOne) are not allowed in the passenger aircraft.
   The Li-ion batteries are classified under Class 9 (dangerous goods see Lithium Battery Guidance Document IATA 2015 Revision 1).
- Never ship a damaged or broken battery.
- 4. If your outboard is going to be stored for more than 2 months, it's advised to have the outboard cleaned (salt removed), checked prior to storage. It's recommended to pack the outboard with the original packaging for storage.
- 5. Ensure there is no pressure on the propeller while in storage
- 6. Store the outboard in a dry, well ventilated place without direct sun exposure.

# **Emergency Situations**

# **Impact Damage**

If the outboard strikes some object in the water, please follow the procedures below.

- 1. Stop the outboard immediately.
- 2. Check the propeller and other components before you start the motor again.
- 3. If the motor is damaged, find your dealer or Remigo service center for help.

# **Submerged Outboard**

1. If the outboard is submerged, stop it immediately. Ensure the outboard is thoroughly inspected before re-operation.

# Low Battery Level

When the battery voltage is lower than a set threshold, the outboard will stop automatically to prevent battery from over-discharging. If this happens when the outboard is far away from the shore, it's recommended to wait for a couple of minutes until the battery voltage recovers, and you can restart the outboard using minimal power - 1 LED on indicator.

### Example of warranty document:



Warranty conditions	S/N:	date of purchase
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#### 1. Extent of warranty

Remigo, d.o.o., Stanežiče 27E, 1210 Ljubljana Šentvid, Slovenia, guarantees the final purchaser of a Remigo outboard motor that the product is free from material and manufacturing faults during the period stated below. Remigo will indemnify the final purchaser for any expense for the repair of a material or manufacturing fault. This indemnification obligation does not cover the incidental costs of a warranty claim or any other financial losses (e.g. costs for towing, telecommunications, food, accommodation, loss of earnings, loss of time etc.).

The warranty ends **two years** after the date on which the product was delivered to the final purchaser. Products that are used commercially or by public authorities - even if only temporarily - are excluded from this two-year warranty. In these cases, the statutory warranty applies. The right to claim under warranty runs out six months after discovery of a fault.

Remigo decides whether faulty parts are repaired or replaced. Distributors and dealers who repair Remigo motors have no authority to make legally binding statements on behalf of Remigo. Normal wear and tear and routine servicing are excluded from the warranty.

Remigo is entitled to refuse a warranty claim if

- the warranty was not submitted properly (see Warranty process)
- the product was not treated in accordance with the instructions
- the safety, operating and care instructions in the manual were not observed
- the product was in any way altered or modified or parts and accessories were added that are not expressly permitted or recommended by Remigo
- previous services or repairs were not carried out by firms authorized by Remigo, or non-original parts were used

unless the consumer can prove that the facts that led to the warranty being void did not affect the development of the fault.

As well as the rights arising from this warranty, the customer also has legal warranty claim rights arising from the purchase contract with the dealer which are not hampered by this warranty.

#### 2. Warranty process

Adhering to the following warranty process is a prerequisite to the satisfaction of any warranty claims. Before dispatching any apparently faulty goods, it is imperative to coordinate the delivery with Remigo. You can contact us by phone, email or post. You can find the contact details on the end of this manual. Please note we are unable to deal with products of which we have not been notified and will therefore refuse to accept delivery.

To check a warranty claim and to process a warranty, we require a completed warranty certificate as well as proof of purchase.

- The warranty certificate attached to this operating manual must show contact details, product details, serial number and a brief description of the fault.
- Proof of purchase must indicate the purchase and the date of purchase (e.g. till receipt.

When shipping, it must be noted that the Li-ion battery is classed as a UN9 hazardous item. Posting and packing must be in accordance with the relevant directive. In this instance we recommend keeping the original Remigo packaging.

We are available to answer any questions regarding the warranty process - simply use the details on the back cover.

> Marko Vrtovec. CEO, Remigo, d.o.o.



### Warranty form

Dear Customer,

Your satisfaction with our products is very important to us. Should it happen that, despite all the care that we continually apply in our production and testing, a product displays a defect, it is extremely important to us that we assist you quickly and unbureaucratically.

So that we can examine your warranty claim and deal with warranty cases smoothly, we require your assistance:

- Please complete this warranty form in full.
- Please make available a copy of your proof of purchase (till receipt, invoice, receipt).
- Please make sure that the transport packaging is appropriate.
- Note when shipping batteries: Batteries are declared as dangerous goods of UN Class 9. Shipping via transport companies must take place as per the Dangerous Goods regulations and must be in the original packaging.
- Please note the warranty conditions listed in the applicable instructions for use.

#### Contact data

First name	Surname	
Street	Country	
Telephone	Post code, town	
E-mail	Mobile phone	

### Complaint data

Exact product designation	Serial number
Date of purchase	Operating hours (approx.)
Dealer from whom the product was pur- chased	Address of dealer (Post code, town, country)
Detailed description of problem (including e	error message, situation in which the error arose,

Remigo, d.o.o. Stanežiče 27E 1210 Liubliana Šentvid Slovenia EU +386 41 769 489 info@remigo.eu



You are most welcome to contact us about anything: question, experience, concern, idea...:

https://remigo.eu/ info@remigo.eu +386 41 769 489

Remigo d. o. o. Stanežiče 27e 1210 Ljubljana - Šentvid Slovenia, EU