



emicro one Operating Manual

Please read carefully!



we are **emobility**

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Introduction

Welcome to the club of **emicro one riders**.

We are delighted to greet you in the community of **emicro** riders and we are certain that you will really enjoy the smallest electric scooter in the world.

This operating manual explains the most important instructions to be followed. It provides you with tips on the maintenance and use of your **emicro** and describes how to operate the vehicle correctly for safe and long-term use.

All data are based on the technical status at the time of writing this operating manual. Any modifications and additions made in the meanwhile are not included in this version. The latest version of the operating manual can be found online at www.micro.ms.

Our global dealer network will be pleased to help you with any questions or problems. Please contact your local dealer and we will do our utmost to provide rapid and straightforward assistance.



Warning

ATTENTION: Please note that riding with electrical support takes getting used to. The acceleration – and hence the forward force – is much greater than with a normal kick movement. With inexperienced riders, this unfamiliar acceleration can lift the front wheel off the ground and lead to falls. Begin carefully and always ensure some room for manoeuvre. Never bend backwards while riding.

ATTENTION: As well as the normal braking performance due to friction, pressing the foot brake also brakes the **emicro** with an electrical motor brake. This greatly improves the braking performance and results in a shorter braking distance. But please be aware that the motor brake is not supported if:

- The battery is discharged so you are riding with muscle power alone.
- The battery is 100% charged and hence energy cannot be regenerated.

The additional braking performance of the motor brake is enormous and greatly shortens the braking distance. Always be aware of this, especially if the additional braking performance is not present in the situations mentioned above.

ATTENTION: Always use the rear wheel brake to slow down and stop. Never brake by rubbing the soles of the feet on the ground! This activates the 'Motion Control' system and you will not stop. It's like attempting to drive a car with the accelerator and brake pedal pressed at the same time.

Prior to first use

Before each trip, check the emicro for road worthiness .

The vehicle is delivered by the manufacturer fully ready for use. Because deficiencies that can impair functioning of the vehicle under certain circumstances can occur during transport as well as any periods off the road, we ask you to always pay attention to the following points before using for the first time - as well as before each trip:

BRAKE: Check that the brake is working correctly. In particular, you must know whether you are setting off with or without electronic brake assistance (motor brake) as this makes a huge difference to the braking power (see Warning chapter).

GENERAL CONDITION: Before each trip, check the emicro to make sure that all screws are tight and there are no loose components.

FOLDING MECHANISM: The folding mechanism is correctly clicked in place and the clamping lever is closed and tightened.

SIDE STAND: The side stand is correctly folded in under the footboard.

BATTERY CHARGE STATUS: Check the charge status of the battery by means of the LED display on the footboard.

The battery is only partially charged when the emicro is delivered. Before using for the first time, fully charge the battery using the charger provided.

Always ensure compliance to the applicable national laws and regulations relevant to road traffic and vehicle class.

Please note that the legislation can differ from country to country and that the **emicro one** is not approved for use on public roads. Information is also available at www.micro.ms.

Study the Warning chapter thoroughly before using for the first time.

Important information at a glance

General information

- The vehicle is not approved for general use on public roads and, for this reason, can only be used on private property. Any use outside this area is at your own risk and without liability of the manufacturer.
- The **emicro** is designed for transporting a single person up to a maximum weight of 100 kg and should only be used for this purpose. Ignoring this instruction is deemed improper use and is at the sole risk of the user.
- Any interventions for increasing the performance or speed and, in general, modifying the features of the scooter are actionable and will be prosecuted by law. They will invalidate the warranty.
- Comply with the highway code at all times. It is your duty to be informed of the law applicable in your country and to follow it accordingly.

- The **emicro** is not a toy. It is not designed for the weight of children. We recommend a minimum age of 16 years.
- The serial number is found on the underside of the footboard. Please note the serial number.

Safety instructions

- Only ride on dry surfaces. Driving on wet surfaces can be very dangerous and must be avoided.
- Never brake by rubbing the soles of the feet on the ground! This movement activates the 'Motion Control' system which in turn leads to acceleration. Always brake with the rear wheel brake (foot brake)!
- Never ride with motor support on the pavement. Not only is this dangerous for you and others, but also illegal in many countries.
- For reasons of safety, we recommend not to ride in the dark.
- Always wear protective equipment, especially a helmet suitable for protection against head injuries.

Caution on steep descents! The braking performance is not sufficient to guarantee safe riding on steep, rapid descents.

- In the rain or after cleaning the vehicle, the braking action may be delayed due to moisture. For this reason the brakes should be "braked dry" on safe, private property after cleaning the scooter.

Study the [Warning chapter](#) thoroughly before using for the first time.

For lasting riding enjoyment

- Never use the **emicro** on wet surfaces.
- Do not jump with the scooter as this causes excessive stresses and ultimately damage to the scooter which is not covered by the warranty.
- Make sure you always avoid potholes and ride at a right angle over curbstones and other obstructions.

See the section on [Operation and Maintenance](#) for further information.



Warranty information

- Strictly follow the instructions for maintaining the footboard in the Maintenance section. Non-compliance with the maintenance intervals of the scooter will invalidate any warranty claims.
- Only ride the **emicro** on dry ground; riding on wet surfaces will invalidate the warranty.
- Do not carry out your own repairs. Always contact your service centre. Opening the footboard will automatically invalidate the warranty. In individual cases, Micro allows opening of the footboard under certain preconditions in consultation with the customer.
- "Tuning" the **emicro** is forbidden. This endangers your personal safety and operating safety, as well as decreasing the operating life of your vehicle. This will also invalidate the warranty.

For more information on warranty, refer to the Warranty section.

Operation

Side stand

The **emicro** has a side stand. This is located under the footboard next to the folding mechanism. Always fold in the stand forwards so it can be folded down again with the toes when required.



Unfolding and folding up

Your **emicro** is **delivered folded up**. It is unfolded and ready to ride in a few simple steps. How to unfold the **emicro** is described below.

1. Release the clamping lever on the right side of the folding mechanism
2. Push both blue knobs on the right and left of the black block at the same time and unfold the front part of the scooter with the handlebar until the locking mechanism fully clicks into place.
3. A click tells you that the scooter is fully unfolded. Now close the clamping lever again on the side.

(To fold up, carry out the same steps in reverse. Make sure that the clamping lever is always closed and fully tightened when riding.)



The 'Motion Control' system

The 'Motion Control' system makes riding with the **emicro** an unforgettable experience. Some brief information on the 'Motion Control' is given below:

- 'Motion Control' only becomes active from approx. 5 km/h. This means the rider must use muscle power alone to accelerate to 5 km/h before the initial support is noticeable.
- The stronger and more intensive the kick (pulse), the stronger and longer lasting the support of the motor.
- A few powerful kicks are more economical and efficient than many small kicks.

Please note that riding with electrical support takes getting used to. The acceleration is much greater than with a normal kick movement. This unfamiliar acceleration comes unexpectedly. When riding for the first time, be extremely cautious and at the same time learn how to brake properly with the foot brake at the very beginning.

Charging the battery and displaying the charge status

Only use the power supply unit supplied by Micro for charging your **emicro**.

The charging process is described below:

- 1. Connect the charger to a power socket. The lamp on the charger should now light green.
- 2. Now connect the **emicro** to the charger. You can see that the charger and scooter are connected correctly when the lamp on the power supply unit changes to red (can take a few seconds).
- 3. When the **emicro is fully charged**, the display on the charger changes back to green.

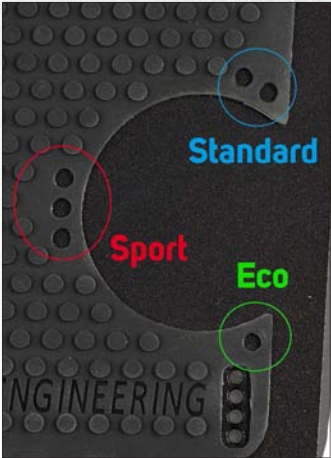
In order to see the current charge status, switch on the scooter by turning the rear wheel. The same applies to checking the charge status during the charging process.



The three riding programs

The **emicro** has three different riding programs. This allows optimum riding performance and correct programming in a wide range of situations as well as conformity to the applicable legislation.

Riding program	Position in the circle on the footboard	Power or force	Maximum support speed
Eco mode	0	250 Watt	15 km/h
Standard mode	00	250 Watt	25 km/h
Sport mode	000	500 Watt	25 km/h



Only ride with the scooter using the riding program with which you feel safe and that complies with the relevant legislation in your country.

Ride slowly to become used to the novel riding sensation, especially when riding for the first time. Do not forget that a higher speed also needs a longer braking distance.

Please also note that, depending on the country, different maximum speeds and restrictions in terms of maximum power apply to electrically supported vehicles. It is your responsibility to be aware of these values accordingly and to adhere to them.

The setting tool contains strong magnets. Be careful never to hold the setting tool close to electronic devices such as your mobile phone or close to credit cards as they could be damaged.

Setting tool



Changing the riding program

Changing the program is very simple and takes no time at all. The setting tool included in the scope of delivery is needed for this.

Hold the setting tool on the circular cut-out on the footboard. The tool must be aligned to the small arrow head engraved on the setting tool. Now you can switch between the three programs by turning the setting tool and aligning the arrow to the empty circles. The LED display shows which riding program is set by flashing dimly three times, followed by flashing brightly three times. One LED flashes in Eco mode, two LEDs flash in Standard mode and three LEDs in Sport mode.

Eco



Standard



Sport



Switching off the motor support

The motor support on the **emicro** can be switched off at any time and the vehicle ridden as a conventional scooter. To switch off the support, the brake pedal must be pressed briefly three times consecutively. **You can see that the support is switched off by the LED display becoming dimmer.**

The motor support now remains switched off until the brake is pressed briefly again three times consecutively.



The battery

The key features of our battery pack are explained and care instructions listed in the following section. Read the care instructions carefully and heed them.

Most important features		Note
Energy content	2.2 Ah = 82 Wh	Can be transported without restriction in an aeroplane
Duration of a charging cycle	60 minutes	Approx. "5 kilometres" already charged after 20 min.
Battery lifetime	>700 charging cycles	Ageing of the cells is reduced thanks to patented cell balancing.
Display of charge status	4 LED lamps in footboard(*)	4 LEDs: 75 - 100% charge status 3 LEDs: 50 - 75% charge status 2 LEDs: 25 - 50% charge status 1 LED + flashing: 10 - 25% charge status 1 flashing LED: Less than 10% charge status

(*) Please note that measurement of the charge status depends on the current. Thus, the display under load while riding always shows a lower charge status than in idle.

Important care instructions

*The following points must be adhered to in order to ensure the longest possible operating life of the **emicro**:*

- Only used the supplied or integrated battery or original spare parts.
- Only charge the battery with the original, enclosed charger of the manufacturer.
- Do not carry out your own repairs to the battery or charger.
- Fully charge the battery each time you do not use the scooter for a prolonged period.
- Fully charge the battery every six months if you have not used the scooter. Storing without sporadic charging can destroy the battery over time.
- Store the battery at temperatures between 10° and 30° Celsius.
- Never ride the **emicro** without the battery connected as this can destroy all the electronics.
- Only charge the battery with the charger supplied and only at temperatures between 0 and 45° Celsius.
- Never charge the battery unattended.

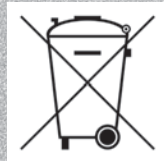
- When charging the battery, ensure proper plug connection, adequate ventilation and a dry environment.
- Never bring the charger, the mains and connection cables into contact with water as there is danger of an electric shock. Do not touch with damp hands.
- Check the connecting plug and charger at regular intervals. If there is any damage, have them replaced to avoid injuries and damage to property.
- Mains and connection cables must not be damaged or crushed by sharp edges or heat.
- Never use the charger if the charger, mains cable or connection show signs of damage.

Never store the emicro when it is discharged as this can result in complete destruction. If not in use, charge the battery every 6 months.

Instructions for disposal

You are already contributing to environmental protection with the **emicro**. Also pay attention to your environment during disposal and heed the following instructions:

- Only dispose of the **emicro** and associated components (e.g. battery) at an approved disposal company or via the community disposal facility.
- Heed the currently applicable regulations. If in doubt, ask your disposal facility about environmentally friendly disposal.



Batteries and electrical devices must not be placed in the household waste.

Range

The **emicro** has a range of 10 – 15 kilometres where these values refer to a rider with a weight of 70 kilograms. Ultimately, the range is highly dependent on a variety of factors. The factors have a significant influence on the range: Profile of the route (hilly or flat), performance of the rider, ground surface, outside temperature, weight of the rider

Maintenance



Maintenance of the footboard

The electronic control unit is located inside the footboard. To ensure adequate water protection over a long period, the screws that seal the cover of the footboard from below must be tightened to the correct torque at regular intervals. All fourteen screws of the footboard must be tightened to 4.3 kN every 100 kilometres or after 3 months at the latest. Use a spanner with adjustable torque for this.

Maintenance of the folding mechanism

Like every micro scooter, the **emicro** can be folded up. A folding scooter always has a certain amount of play. This will become greater over time because of the usual load. So to ensure you enjoy your scooter for a long time, we show you here how to practically remove the play of your folding mechanism again in a few simple steps:

Maintenance of the quick clamp lever

1. Open the quick clamp lever and spray a little lubricant onto the sliding surface of the quick clamp lever.
2. Retighten the setscrew on the opposite side of the folding mechanism. Tighten this setscrew until it is possible to close the quick clamp lever with pressure up to the end stop.



Maintenance of the push knobs

If resistance is noticeable when unfolding or folding your **emicro** or it cannot be unfolded or folded at all, this may be because the push knobs no longer operate correctly. This is a normal wear process and can be remedied in a few simple steps:

1. In the main block of the folding mechanism there are three openings, each surrounded by a silver frame. The bolts inside them must be regularly lubricated. To do so, spray lubricant into these holes. Note that a total of three such bolts must be lubricated. Two of the openings can be lubricated when folded up (see Fig. 1).
2. Lubricate the third bolt, and hence the third opening, when unfolded (see Fig. 2)
3. Then press a couple of times on the bolts with your finger to spread the lubricant (Fig. 3).



Maintenance of the telescopic handlebar

If the quick clamp on the extension tube of the handlebar no longer closes satisfactorily, you can maintain this in the same way as the quick clamp on the folding mechanism.

- 1. Spray a little lubricant onto the sliding surface of the quick clamp.
- 2. Retighten the setscrew on the quick clamp.



1



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Technical data

Motor power	500 Watt
Torque	4 Newton metres
Battery capacity	36 V, 2.2 Ah (82 Wh = portable in an aeroplane)
Charging time	1 hour
Weight	7.5 kilograms
Dimensions	780 x 490 x 995 mm
Dimensions folded	780 x 490 x 250 mm
Maximum load capacity	100 kilograms
Wheel size	Front wheel: 150 mm; Rear wheel: 120 mm



Component parts



Warranty

You can expect the following warranty service from us:

You can expect the following warranty service from us:

- 2 years warranty on the Micro Scooter components: Footboard, complete front assembly and brake pedal. Excluded from this are all wear parts, small parts and screws.
- 1 year warranty on the battery (60% of the original rated capacity) or 1000 full charge cycles (whichever occurs first).

Scope of warranty services

Based on this warranty, Micro commits to the following services during the respective warranty periods:

At the discretion of Micro, repair or replacement by equivalent parts/components where the replacement can vary from the original in terms of model and/or colour;

Services that do not fall under warranty and lie in the sphere of competence of the dealer as well as the cleaning of scooters delivered in a dirty condition will be billed at the standard hourly rate with all arising costs for material and transport;

- Any service rendered under warranty (repair/replacement) does not extend the original warranty.
- Any other claims than those mentioned above do not apply.

Severability clause

If any provision of this warranty is or becomes invalid, or has a loophole that needs to be closed, this will not affect the effectiveness of the other provisions. The provision that is missing or invalid shall be replaced by a provision that comes as close as possible to the intent and purpose of the original provision.

Applicable law and jurisdiction

In the event of any dispute resulting from this warranty (also with regard to the question of its existence or validity), the exclusive competence of the Zurich Canton courts is agreed. This purchase contract is subject to Swiss law with the exclusion of conflict laws as well as the United Nations Convention on Contracts for the International Sale of Goods is excluded (UN Sales Convention).

The warranty coverage does cover damage caused by the following:

- Use during rain, on wet surfaces and other weather effects.
- Improper use, appropriate use or negligent operation (e.g. jumps).
- Improper alteration by third parties (e.g. by opening the footboard).
- Improper charging (e.g. by charging with a different charger than the one provided).
- Exceeding the maximum speed of 40 km/h on downhill rides.
- If the vehicle is technically modified without the agreement of the manufacturer.
- Subsequent conversion/installation of non-compatible or non-original parts.
- Wear parts such as ball bearings, sliding bearings, bearing bolts and bearing screws, etc.
- Non-emicro parts/components.
- Lack of warranty inspection within the appropriate period.
- Damage as a result of missing or incorrect setting(s) or worn components.
- Consequences of falling
- Damage as a result of unsuitable cleaning agents, utensils such as high pressure cleaners or additives used.
- Commercial leasing/hiring out



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