



Electrolyte



INTRODUCTORY BOOKLET

Contents

Contents	2
Welcome	3
Scope of delivery	4
Warranty provisions and guarantee	4
Putting into operation	5
General information about our batteries	6
Subsequent light installation	8
Operating instructions for the Electrolyte single swing arm	9
Operating instructions for the Vorradler drive system	15
Notes on the Kosmopolit S2 with couplers	20
Special notices	21
All-round service	22
Bicycle passport	23

Dear Customer,

Thank you for your confidence in us. We trust you will enjoy your new Electrolyte bicycle.

In order to get the most out of the product and use it safely, following the instructions in this manual is essential. Store this manual in a safe place and pass it on to the new owner if you sell the product.

This manual has to be read in detail before using the bicycle for the first time. All sections are equally important and have to be studied. Please consult us in case of any questions, uncertainties or problems.

Our operating manual consists of several parts – this introductory booklet, the bicycle manual for trekking and city bicycles, the bicycle manual for pedelecs/e-bikes and the Go SwissDrive operating manual (only for the Vorradler models). We have also included the manuals of the respective component manufacturers for some components, which take precedence over the instructions in this manual. Failure to observe the manual(s) may lead to personal injuries or damage to property. It is your responsibility to inspect the Electrolyte bicycle before each use and to have any required maintenance and repair work performed.

Please also visit our website **www.electrolyte.bike** regularly, since we are always providing current information about our products for you there.

Scope of delivery

First of all, please check whether all required descriptions, components and operating manuals are included and complete. The scope of delivery includes the following:

- Bicycle
- Battery
- 2 keys for locking the battery
- Cover to seal the single swing arm when the battery is removed (only on models with single swing arm)
- 2 pedals (please note right and left)
- Charger
- Electrolyte introductory booklet
- Manuals for the bicycle: "Trekking-City Bike" and "EPAC/E-Bike/Pedelec"
- Go SwissDrive operating manual (only for the Vorradler model)

Attention:

The standard scope of delivery for the models may not comply with the road traffic ordinance! Missing safety equipment has to be retrofitted prior to use in public road traffic. Please contact your specialist dealer or us regarding country-specific differences in this regard.

Warranty provisions and guarantee

Special rules apply to the battery. Here the statutory warranty term is only six months since the battery is a wear part. However, we guarantee the battery for an additional six months with a residual capacity of 70% if a total of 1000 full charging cycles is not exceeded. The battery has to be submitted with the corresponding sales documentation in case of a warranty claim.

Provided they are registered on our website **www.electrolyte.bike/registrierung**, we guarantee our frames for 10 years if the bicycle is used as intended. Our guarantees are valid exclusively for the first owner.

Putting into operation

Your bicycle/pedelec was fabricated with due diligence and is normally sent to you via a shipping company in a box produced especially for the shipment of your bicycle. It has to be adapted to the rider before it is used for the first time. The seat has to be adjusted to the rider and the enclosed pedals have to be bolted on. Please note the different threads; there is a pedal for the left and right side respectively (marked on the threads). The handlebars have to be aligned so they are straight, the headset play adjusted and the stem tightened. (Attention: Complying with the torque specifications is mandatory.) If you bought a pedelec from us, you may have to insert the battery plug. All related information and detailed descriptions are found in the supplied manuals: "Trekking-City Bike" and "EPAC/E-Bike/Pedelec". If you are not 100% certain, have the settings checked/adjusted by a specialist dealer. Contact us in case of questions or uncertainties.

Note:

The battery has to be fully charged with the supplied charger prior to first use. See the section "General information about our batteries" and the description of your bicycle in this operating manual.

General information about our batteries

Information about correct handling of the battery

Proper care of the battery helps maintain its capacity over a longer period of time.

Charging the battery

The battery is charged using the magnetic plug. Only the supplied charger may be used for charging. The charger has to be plugged in to a 230 volt outlet and then connected to the battery. Two LEDs on the charger provide information about the charging process. The related description is printed on the charger.

If you have chosen a bicycle with our single swing arm, you can read the current battery charge level in green on the battery during the charging process. The blue flashing LED indicates that charging is in process.

Correctly charging the battery

- The battery always has to be charged with the charger provided.
- Charging the battery is only permitted at an ambient temperature between +10°C and +30°C.
- Before charging, sufficient time should be allowed for the battery to adjust to the ambient temperature.
- Fully discharging the battery in every cycle shortens its service life. Therefore, it is best to charge the battery after every longer trip, and to avoid draining it entirely.

Using the battery at low temperatures

Naturally the battery can also be used at low temperatures. However, the battery temperature should be between +10°C and +50°C at the start of a trip. Please note that the battery capacity is much less at lower temperatures.

Note:

Please disconnect the battery from the charger as soon as possible after charging. It must not remain connected to the charger for a longer period of time (days/weeks).

Note:

Do not attempt to get a bit of extra distance by restarting the system repeatedly. Doing so can damage the battery.

General information about our batteries

Protect the battery against excessively high temperatures

Avoid exposing the battery to extreme heat, for example due to exposure to direct sunlight or when a car is standing in full sun. High temperatures quickly and irrevocably reduce the battery capacity.

Correctly storing the battery

- Do not store the battery in the bicycle or on the charger, but always separately.
- Also do not store the battery after it has been drained, since this can lead to deep discharge. Failure to comply voids the warranty.
- Store the battery at temperatures between +10°C and +30°C

Note:

Temperatures in the garage or basement often fall below +10°C, especially during the winter months.

Attention:

Do not short circuit the battery. There is a risk of short circuit due to metallic objects or other conductive surfaces in the vicinity of the battery contacts and the charging plug. Caution! Loose metallic objects are attracted by the magnet in the battery and can cause a short circuit.

Further information on proper handling of the battery is found in the EPAC/e-bike/pedelec manual.

Subsequent light installation

If your bicycle is not equipped with a lighting system at the factory, it can be retrofitted. The supply voltage of the battery in the Vorradler and the battery of models with the single swing arm is 36 volts. On the Vorradler, the cables provided for the purpose are found on the wiring harness that runs from the handlebars into the frame (orange is the positive terminal, black is ground). On models with the single swing arm, you will find a plug for connecting the lights in the shaft tube of the fork. On the plug, pin 1 is the positive terminal and pin 2 is ground.

Operating instructions for the Electrolyte single swing arm

Removing the battery

The battery of your Electrolyte bike can be charged while installed in the bicycle or outside it. To remove the battery, first disconnect the magnetic plug on the top of the battery and then unlock the lock at the bottom of the single swing arm. The lock is unlocked when the lock cylinder bolt disengages. Now the battery can be pulled out of the single swing arm.

Installing the battery

To reinstall the battery, slide it into the open single swing arm from above. Note the correct orientation of the battery. The battery orientation is correct when the LED display faces the rear of the bicycle. Now you need to engage the lock at the bottom of the fork and reconnect the magnetic plug to the battery.

Note:

Before inserting the battery, verify that the cylinder lock bolt is disengaged/projecting. Otherwise system components may be damaged.

Note:

Before using the bicycle, lock the battery by pushing in the lock cylinder bolt. The bolt not only protects the battery against theft, but also holds it in place.

Note:

When the battery is not installed in the bicycle, close the open end of the single swing arm with the supplied cover. If this is not done, moisture may get into the system and damage the electronics.



Lock at the bottom of the fork
(open, cylinder is out)



Battery can be removed



Battery inserted correctly
and switched on

Operating instructions for the Electrolyte single swing arm

Charging the battery

First switch the battery off and remove it from the bicycle as described. Only use the supplied charger to charge your hybrid bicycle. The charging progress is indicated by the LEDs on the battery. Charging it while installed in the bicycle is also possible. In order to do so, the battery has to be switched on before connecting the charger.

The battery switches off automatically once it is fully charged. Then disconnect the charger from the battery charging receptacle.

Please also note the general information for the correct handling of our batteries on pages 5 and 6 to maximise the service life.

Note:

Please disconnect the battery from the charger as soon as possible after charging. It must not remain connected to the charger for a longer period of time (days/weeks).

Control elements of the single swing arm



Control elements of the single swing arm with bullhorn handlebars



Operating instructions for the Electrolyte single swing arm

Functional description of the single swing arm

The table below indicates how the system responds to your actions:

Battery not installed	
Action	System response
Pressing the On/Off button next to the charge level indicator	• Battery is switched on and LED display indicates charge level
Pressing and holding the On/Off button (approx. 5 seconds)	• Battery is switched off and LED display turns off

Mode blue – driving bicycle with support by pushing the turbo button (charge level is shown in blue)	
Action	System response
Pressing the On/Off button next to the charge level indicator	• System is started (in blue mode) • LED display shows the charge level
Pressing and holding Turbo and pedalling forward	• The system provides maximum support and accelerates to the configured maximum speed • The LED display indicates the charge level in blue
Don't pressing and holding Turbo and/or don't pedalling forward	• The system does not provide support • The LED display indicates the charge level in blue
Pedalling forward	• driving bicycle without support from the system
Pressing and holding the On/Off button (approx. 5 seconds)	• The system is powered down and the LED display turns off

Operating instructions for the Electrolyte single swing arm



Mode green – constant support (charge level is shown in green)

Action

Pressing the On/Off button next to the charge level indicator

Activating permanent support (green mode)
by pressing the Plus button once

Peddalling forward

Setting the desired drive power level with the Plus/Minus button

System response

- System is started (in blue mode)
- LED display shows the charge level
- Brief flashing of the first LED to indicate the 1st power level
- After flashing, the LED display is lit continuously in green and indicates the battery charge level
- The system provides the support selected with the Plus/Minus button
- LED display shows the charge level in green
- After pressing the Plus/Minus button, the LED flashes briefly and displays the selected power level
- After flashing, the LED display is lit continuously in green and indicates the battery charge level
- There are 4 different power levels
- If the Minus button is pressed at power level 1, permanent support is deactivated. The system switches to blue mode. After flashing, the LED display is lit continuously in blue and indicates the charge level

Operating instructions for the Electrolyte single swing arm

For bullhorn handlebars only:

Setting the desired drive power level with the Plus button

- After pressing the Plus button, the LED flashes briefly and displays the selected power level
- After flashing, the LED display is lit continuously in green and indicates the battery charge level
- There are 4 different power levels • If the Plus button is pressed at power level 4, permanent support is deactivated. The system switches to blue mode. After flashing, the LED display is lit continuously in blue and indicates the charge level

Pressing and holding Turbo
and
pedalling forward

- The system provides maximum support and accelerates to the configured maximum speed
- The LED display indicates the charge level in green
- After releasing the Turbo button, the system returns to the previously selected power level

The user is not pedalling forward

- The system does not provide support
- The LED display indicates the charge level in green

Pressing and holding the On/Off button (approx. 5 seconds)

- The system is powered down and the LED display turns off

Attention:

Please contact us directly if the functionality of the drive system is not clear to you.

Operating instructions for the Electrolyte single swing arm



Error message

Display	System behaviour	Cause	Troubleshooting
LED display does not respond	System does not respond	System on standby	Briefly pull out the battery to restart the system
LED display does not respond	System does not respond	Battery drained	Charge the battery

Operating instructions for the Electrolyte single swing arm

The first trip

For your first ride, choose an empty area outside of normal road traffic.

Ride without using the drive system at first and familiarise yourself with the braking characteristics of the bicycle. If your bicycle has two brake levers, the brake lever on the right in the direction of travel operates the rear brake and the one on the left operates the front brake. If your bicycle only has one brake lever, it operates the front brake while the rear brake is operated by back-peddalling.

Once you have familiarised yourself with the braking and driving characteristics of the bicycle and are able to control it safely, the pedalling assist can be activated.

Attention: Important notice regarding driving characteristics

Never ride freehand! - Due to the weight distribution which deviates from normal bicycles, our models with the single swing arm exhibit different driving characteristics than normal bicycles which makes riding freehand more difficult. Therefore, make sure you always have at least one hand on the handlebars.

Attention:

Due to the high braking force of the installed brakes, the wheels may lock if the brake lever is pulled too hard. This can lead to falling.

Operating instructions for the Vorradler drive system

Removing the battery

The battery of your Vorradler can be charged in the bicycle or outside it. To remove the battery, first disconnect the magnetic plug on the left side of the battery and then open the lock with the supplied key. The lock is unlocked when the lock cylinder bolt disengages. Now the battery can be pulled out of the frame.



Disconnect the plug on the battery



Battery can be removed

Operating instructions for the Vorradler drive system

Removing the battery from the Vorradler S3 E Comfort (low entry)

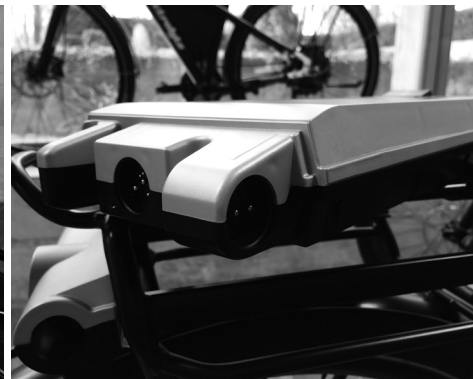
The battery of your Vorradler can be charged in the bicycle or outside it. To remove the battery, first unlock the lock on the right side using the supplied key. The lock is unlocked when the lock cylinder bolt disengages. Now the battery can be pulled out of the frame by pushing down the unlock mechanism at the rear and pulling the battery out of the luggage carrier to the rear at the same time.



Luggage carrier battery with On/Off button and charge level indicator on the battery



Lock is open, battery can be removed by pressing the unlock mechanism at the rear and pulling



Battery charging receptacles – side for in the bike, rear for charging outside the bike

Operating instructions for the Vorradler drive system



Installing the battery

To reinstall the battery, slide it into the frame from above. Make sure that the hooks on the bottom of the battery fit securely in the guide rail on the frame. Reconnect the magnetic plug to the battery and engage the lock cylinder.

Installing the battery in the Vorradler S3 E Comfort (low entry)

To reinstall the battery, slide it fully into the luggage carrier from the rear. Make sure that the locking mechanism on the top of the battery engages securely on the luggage carrier. Then engage the lock cylinder.

Charging the battery on the Vorradler S3 E Comfort (low entry)

The battery is charged using the magnetic plug. Only the supplied charger may be used for charging. The charger has to be plugged in to a 230 volt outlet and then connected to the battery. The battery can be charged while installed in the bicycle or outside it. While in the bicycle, the charger has to be connected to the charging receptacle on the long side of the battery. If the battery is charged outside the bicycle, the charging receptacle on the short side has to be used. The LEDs on the battery indicate the charge level. If the LED on the charger is lit up in red, the battery is being charged. When it lights up green, the charging process is complete and the charger can be disconnected.

Functional description of the Go SwissDrive drive system

For the functions of the Go SwissDrive drive system as well as important information regarding maintenance, care and assembly, see the enclosed Go SwissDrive operating manual.

Operating instructions for the Vorradler drive system

Note:

Before inserting the battery, verify that the cylinder lock bolt is disengaged/projecting. Otherwise system components may be damaged.

Note:

Before using the bicycle, lock the battery by pushing in the lock cylinder bolt. The bolt not only protects the battery against theft, but also holds it in place.

Note:

If the system cannot be started on the display of the Vorradler S3 E Comfort (low entry), the battery is in deep sleep mode. You first have to switch on the battery with the On/Off button on the battery and then activate the system on the display.

Notes on the Kosmopolit S2 with couplers



Coupler

The threads and tothing of the couplers have to be cleaned and lubricated with Teflon grease prior to assembly. We have made the best experiences with the Finish Line™ Extreme Fluoro grease. Wipe off old and dirty grease with a dry cloth.

In the course of assembly, make sure there is nothing between the teeth of the couplers and verify that they engage cleanly and smoothly. Damaged teeth can result in an unsafe connection. Therefore, make sure they are not damaged when the frame is disassembled.

During disassembly and assembly of the frame, make sure that both frame halves are aligned so that the coupler nuts can be turned by hand. The installation wrench is only needed for final tightening and loosening of the nut. Use the torque wrench to tighten the couplers to at least 45Nm.

Further information on handling the couplers is found on the following website:
www.sandsmachine.com

Note:

Before each trip, check the couplers to make sure they are still firmly tightened.

Special notices

Attention:

Never open the controller, battery, motor or other components to make repairs or change settings yourself. Failure to comply results in a risk of injury and voids the warranty.

Attention:

If the bicycle is equipped with a belt drive instead of a chain, make sure that it is always tightened correctly. Further information and assistance is available under www.carbondrivesystems.com.

Note:

Never clean the bicycle and its electrical components with a pressure washer or jet of water, since water may get into the electrical components. A short circuit in the electrical system can damage the battery or other components. Resulting damages are not covered by the warranty.

Note:

The tyre pressure has a major influence on the driving characteristics of your bicycle. Therefore, check the tyre pressure before each trip. In most cases, we recommend inflating the tyres to the minimum allowable pressure only. This is found on the tyre, and results in optimum riding safety and comfort.

Further information is found in the trekking/city bike manual.

All-round service

Electrolyte bikes are built individually according to your wishes and conveniently delivered to your home. You receive a fully assembled bicycle that is ready to use. Simply unpack it, align and tighten the handlebars, bolt on the pedals and start riding.

Need help?

Direct communication simplifies many things in case of service. Please contact us directly and we will look after the rest. Whether we send a service technician directly to you, refer to you a dealer near you, organise the pick-up of your bicycle or make your dream bike ready to use again with a simple tip – we are here for you.

For further information and tips, please visit:
www.electrolyte.bike/en/f-a-q-s/

Contact information:

Monday to Friday from 10 am to 6 pm:
+49.(0)8093.9058280

Or by e-mail:
info@electrolyte.bike

Bicycle Passport

Brand Electrolyte Special features

Manufacturer Electrolyte GmbH

Model

Vehicle type ☐ Bicycle ☐ Pedelec 25km/h ☐ S-Pedelec 45 km/h

Field of application ☐ Trekking/City ☐ Racing bike ☐ Mountain bike

Frame size

Colour

Frame no.

Allowable gross weight 130 kg (bicycle, rider and luggage)

Allowable luggage carrier load

Trailer permitted ☐ Yes ☐ No

Date, signature and stamp of the manufacturer



Electrolyte

www.electrolyte.bike
