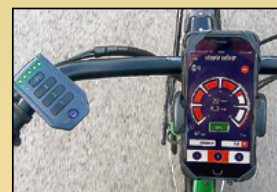
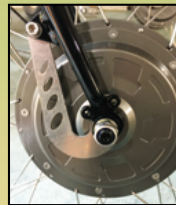
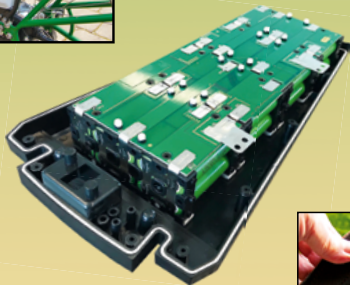


utopia-velo.de

Pedersen Manufaktur

Instruction Manual For bike & pedelec

Stand 19.11.2019



Read before first ride

- » Take particular care when riding your new bike for the first time.
- » While riding, keep both hands firmly on the handlebars and the feet on the pedals.
- » Test the driving behaviour on an uneven surface at an appropriate speed. In this way you will learn to react to unexpected movements of the bike and handlebars.
- » Small obstacles should be crossed at an appropriate speed.
- » Obstacles that are higher than 5 cm should be crossed carefully and the saddle relieved a little.
- » When driving downhill, make sure that you do not reach a speed that is too fast. This could be dangerous. Brake in time and do not drive too fast during the running-in time.
- » The Utopia wheels are robust, but they are not suitable for every use or riding style.
- » No liability for accidental damage caused by races, jumps, stair rides, MTB trails or similar.

Climbing up and starting up

- » The ascent is best when the bike is inclined. Sit and adjust a light gear, then start driving. Please do not get on your bike with the classic „men’s ascent“.

Seat position and seat post

- » Please observe the seating position recommended for the model:
- » The Speedlifter as handlebar height adjustment allows you to choose between two seating positions at any time, e.g. upright and slightly inclined.
- » The seat post should be extended by max. 14 cm when sitting upright, by max. 16 cm when sitting inclined for sport, otherwise the weight shift to the rear wheel hub will be too large and the wheel tends to be rear heavy. This may result in a risk of breakage in the medium term.

Possible seating positions on the models

Seating Position	Models
 Upright	Crane, London, Seagull, Sprint - Pedersen
 Slightly inclined	Crane, London, Gull, Sprint - Silver Gull, Roadster
 Low inclination	Silver Gull, Roadster

Permissible total weight of your bike

- » The permissible total weight always includes bicycle, motor and battery, rider and luggage.
- » (shopping, luggage, lock, filled water bottle, etc.) and bicycle trailers.
- » Your bike must not be subjected to any higher loads,
- » as the permissible total weight of your bike.
- » Trailers are part of the permissible total weight.
- » When the load is distributed to trailers with overrun brakes and heavy-duty couplings, the permissible total weight is increased by up to 60 kg. (Weber Utopia Edition „Cargo“)

Permissible total weight depending on model and tyre width

modell	with tyre width 50, 54 or 57	with Big Apple 55 or 60
crane	Permissible total weight 180 kg	Permissible total weight 200 kg
London	Permissible total weight 180 kg	Permissible total weight 200 kg
seagull	Permissible total weight 160 kg	Permissible total weight 180 kg
sprint	Permissible total weight 160 kg	Permissible total weight 180 kg
Silver Gull	Permissible total weight 160 kg	Permissible total weight 180 kg
roadsters	Permissible total weight 160 kg	Permissible total weight 180 kg
pedersen	Permissible total weight 150 kg	Permissible total weight 170 kg



Different Seating positions



Picture 1
Saddle set too low.



Picture 2
Set saddle higher.



Picture 3
Correct saddle height:
Heel on the pedal. If your leg is almost straight, you should have the ball of your foot firmly on the ground.
Depending on your well-being, you can also make different settings.

Proper air pressure for tires

Tyres	min. - max. air pressure
50 Mondial	2.5 - 5.0 bar
50 Supreme	2.5 - 4.5 bar
55 Big Apple	2.0 - 4.0 bar
57 MTB plus	2.0 - 4.0 bar
60 Big Apple	2.0 - 4.0 bar

The air pressure of your tyre should move within this range. The lower the pressure, the more comfortable your bike will be. The higher, the harder. The table below shows the air pressure range for which your tyre is approved. The correct air pressure depends on the following criteria:

weight

of driver and luggage. The more weight, the higher the air pressure must be.

comfort

Higher comfort = lower air pressure.

driving qualities

If the air pressure is too low, the driving behaviour becomes spongy and the danger of plates increases. The compromise between driving comfort and smooth running is different for each driver.

Photo 1

The tyre has enough air if you don't feel the rim when driving over edges.



Photo 2

This tyre compresses strongly when touching the ground, it has too little air. This can make the driving behaviour spongy and increase the risk of breakdowns.



Check before each ride

Is everything well fastened?

- » Check that the wheels are seated correctly.
- » Is the stem handlebar unit firmly connected?

Seat post height

- » The seat post of our steel frames should be extended by max. 14-16 cm depending on the weight. The mark for maximum pull-out height is 16cm (sporty driving style). Otherwise the driving behaviour becomes unstable and there is a risk of breakage.
- » When using supports with an aluminium sleeve, make sure that the sleeve is not pulled out.

brake test

- » While standing, tighten both brake handles firmly and then try to push the wheel forward. If the brakes grip properly, you will feel resistance. If the fork moves, the headset is not firmly tightened.

Does your bike light up?

- » Test with Nabendynamo in the front wheel by strong turning with switched on light whether the light burns.
- » With the pedelec, the light comes on directly when the pedelec is switched on and the power comes from the battery!

Are the handlebars and saddle tight?

- » Load these parts while standing, then you will see whether the handlebars and saddle are well fastened.

Is there enough air in the tyre?

- » Check the pressure at the manometer of a floor pump or at the filling station.

Shard or splinter in the tyre?

- » Check the tyre surface for deep cuts. If too many cracks are visible, it is better to replace the tube and tyre.

Do you feel vibrations?

- » If your bike vibrates while riding, there can be many reasons:
- » Do you drive freehand or with too heavy luggage, at too high a speed or with loose spokes?
- » Please also check that the axle nuts and control bearings are tight.

Cracks in the lacquer or compression?

- » Please check the frame and fork regularly for cracks in the paint or compressions in the tube. This could indicate a rupture. It goes along with cleaning.

What to do in case of defects?

- » If you find any defects during these routine checks before driving, you should contact a specialist workshop.
- » Or with Utopia by mail. Please always indicate the frame number.

Important safety information for drivers

Running-in time and inspection

- » In the running-in time screws can loosen, gears and brakes lose their adjustment. Therefore your new bicycle should be inspected after 250km or - at low mileage - after 3 months in a good specialist workshop (Utopia Partner).
- » Please have the annual inspection done regularly so that you can enjoy your Utopia bike for a long time.

Luggage on the bike

- » When taking your luggage with you, you must take into account the carrying capacity of your luggage carrier. The weight information assumes that you fasten the luggage correctly. Luggage 2/3 rear and 1/3 front on lowrider.

Important information about the seat post

- » The aluminium seat posts are fitted with Vaseline in the frame. The support must be re-greased once a year, otherwise it may rust. In the case of steel supports, no grease must be allowed on the support.

The wheel falls over

- » If your bike is parked with the rear stand, it may fall over by turning the front wheel. This danger is reduced by the steering damper (standard on pedelecs, optional on bicycles). Nevertheless be careful when parking on a steep road.

freehand driving

- » We do not guarantee that freehand driving is possible. It is also not allowed according to the StVO (at least one hand should be on the handlebar). There are different reasons why you can't ride a bike.

Safe braking

- » Please make some braking attempts with the new wheel first off the road. The new brakes could be much more „biting“ than you are used to. Please check whether you can grip the brake handles comfortably and always have the handlebars well under control. The HS33 brake handles are adjustable to the hand size. The brake linings of the hydraulic brake must not be set narrower than 2 mm from the rim. Otherwise the braking power is reduced and the brake pulls on one side only.

wear parts

- » Utopia Velo wheels are robust and low-maintenance, but not wear- and maintenance-free. They need annual inspections. Your new bike has wear parts that need to be replaced.

Bicycle chain, sprocket, chain rings

- » The moving parts of the gears such as chain, sprockets, chainrings and shift rollers are subject to heavy wear. Chain and sprockets should be sprayed with Ballistol (at the latest when it squeaks). The service life depends on the care, maintenance and use of the wheel (mileage, rain rides, dirt, salt and excessive idle times).

Gear cables and brake lines

- » Gear cables must be serviced and possibly replaced annually if they are used all year round. The hydraulic brake line almost never wears out, the pressure must be checked during the inspection.

tires

- » The air pressure is crucial for comfort and smooth running. Check the air pressure every 3-4 weeks and pump up. For pumping, please use a floor pump with manometer or the pump at the filling station.

brake pads

- » Brake linings are subject to functional wear. This depends on the length of use and your driving style. Replace the coverings at the latest when half of the cross incisions have been made. Only red coatings.

steering stop

- » The steering stop is mounted in the headset. Standard for pedelec, otherwise optional. It prevents the handlebar from turning over completely and thus usually prevents the parked wheel from falling over. It protects brake, circuit and motor cables from injury.
- » Attention: With a lot of force you can turn the handlebar over the stop. This will damage the steering stop and stop working. Then the lower control bearing must be replaced.

chain guard

- » The chain guard is located at a point where shocks occur quickly. Please check the straight alignment more often and make sure that the screw connection is tight - but not too tight - during the annual inspection.

saddle

- » Especially when sitting upright, the saddle is a wearing part. Please never lift the bike by the saddle!

Mud flap on mudguard

- » The thin mud flaps on the front wheel are subject to wear due to small stones or impacts. Stronger dirt traps last longer, but the mudguard wears out faster.

The correct tension of the chain

- » The chain must never be tightly tensioned with hub gears, but must be loose and move upwards and downwards at least 15 mm. Since the front chainring is never 100% round (tolerance about 1 mm), it should never be completely tight. Too tight a chain reduces efficiency and leads to rapid wear of the chain and teeth.
- » They don't ride easier, but always noticeably heavier when the chain is tightly tensioned. The wear of the chain, chainring and sprocket is thus considerably accelerated. More frequent chain tensioning is required. A vicious circle...
- » Please pass this information on to the workshop. Loosely tensioned chains are especially important for country chain guards!
- » With derailleur gears, the rear derailleur takes over the tension of the chain and keeps it loose.

Chain care and life expectancy of the chain

- » Do not clean your chain with a cleaning kit. That's only good if you want to do it after every ride. The easiest way is to use a cloth and a soft toothbrush. Then spray on some Ballistol to protect the chain.
- » Ballistol prevents dirt from sticking to the chain and does not flush the viscous grease out of the chain. It's gentle and you don't have to clean it.
- » Important: Measuring gauges are not suitable for hub derailleur chains! They are only useful for derailleur chains.
- » If the front and rear sprockets are made of steel, you can drive a good 4,000-12,000 km with them.
- » We recommend For hub gears KMC X1, for Deore derailleur gears KMC X11 and for the care of economical Ballistol use.
- » Attention: For Deore 11-speed derailleur gears and steel chainring KMC X11 must be used.
- » You can tell by the teeth of the chainrings when it makes sense to replace the chain. With shark teeth, it's time.
- » Change chain and sprocket together. This ensures smooth running and a long service life.

baggage handlers

- » We offer for Utopia wheels and Pedersen several luggage carriers. The carriers have different carrying capacities. Please check the carrier.
- » Luggage must always be securely fastened. Otherwise it can make the handling very unsafe. If more than 20 kg, please note weight distribution: The rule of thumb is: 2/3 rear and 1/3 front in pockets on the Low Rider.
- » Baskets or bags on top of the carrier or handlebar should only be lightly loaded. Otherwise the driving behaviour becomes unstable in curves.
- » The best handling is achieved when your luggage is stowed sideways in well secured panniers. This means that the centre of gravity is close to the impellers near the axle. This ensures a very safe driving experience.
- » You can load up to 45 kg in rear and front luggage bags.
- » Take this weight into account when calculating the permissible total weight of the wheel.
- » For heavy and large luggage such as water or beer crates, we recommend bicycle trailers. The luggage racks are not suitable for this.
- » The classic panniers can be easily hooked into the Racktime pedelec carrier with 1 or 2 batteries.
 - » Newer bags are sometimes narrower and no longer fit correctly.
 - » Utopia now offers Racktime adapter brackets, which broaden the top of the carrier.
 - » The Snap-it attachment for basket or box is then no longer possible.



baggage handlers	load	remark
Racktime Addit	25 kg Max. Load	Alu, with Snap-it System
Tubus Logo	26 kg Max. Load	CroMo Steel
Racktime Utopia Pedelec Strap	20 kg, plus up to 2 Akkus	Alu, mit Snap-it System
Tubus Locc	40 kg Max. Load	No longer produced
Büchel Traveller High	25 kg Max. Load	Alu, with spring flap
Tubus Low Rider Tara - Utopia	18 kg (9kg per side)	For Low Rider Luggage Bags

Important components of the Bike

Note longer chain length

- » Most Utopia wheels have a longer wheelbase than today's short wheels. Therefore, our chains are also longer than the standard chains you can buy.
- » Please indicate the frame number when ordering the chain, we will then deliver the suitable length.

frame number

- » The frame number on each bike is on a sticker on the back of the seat tube. It's always protected under the clearcoat.



bottom bracket bearing

- » Utopia bottom bracket bearings with industrial bearings do not require lubrication as they are greased for life.
- » The black fibreglass threaded shells hold the encapsulated bearing housing in the frame.
- » If bearing play is suspected, usually only these shells have to be retightened slightly.
- » The threaded shells are secured in the thread with removable industrial adhesive and must not be greased or oiled. If loose, screw on again and secure with medium-hard adhesive.
- » Cranks must sit firmly on the axle. Loose connection is a frequent cause of cracking.
- » The pedals must be tested for strength, they are also a reason for crackling noises.

brakes

- » The Magura HS11 hydraulic brake has a 3-finger lever, but no possibility to adjust the grip distance to the handlebar. The optional HS33 offers this setting.
- » Magura brake boosters are only screwed on one side, the other side is plugged in.
- » Adjustment work on the brakes is necessary when a brake rubber no longer goes back. Sometimes cleaning also helps.
- » It usually occurs when the rubbers are placed too close to the rim. According to Magura the distance from the rubber to the rim should be 2mm.
- » Due to the 2mm distance the pressure in the handle appears lower, in practice the brake pressure becomes stronger and the dosage better.
- » If the braking force is not increased by readjusting the rubbers, venting must be carried out.

speedlifter

- » The Speedlifter Classic with 10 cm height adjustment is standard on every Utopia bike.
- » In case of loosening, the quick-release must be adjusted opposite the screw.
- » How tight the quick-release should be depends on your weight and the desired seating position.
- » If you notice that it is too loose, it can be readjusted quickly and easily.

tax rate

- » The headset has an encapsulated industrial bearing at the bottom and a classic conical bearing at the top. This harmonizes better with the Speedlifter.

Important components of the Bike

- » It allows a higher contact pressure of the bearing. Especially important for the front engine.

Rims for Utopia wheels

- » The Exal XL25 mm rims for 47-60 mm tires, robust and thick-walled. Made in Germany.
- » When the recess is braked, the rim must be replaced (after about 25.000km). The service life depends on the driving behaviour.

spokes

- » The spokes on a Utopia wheel usually last very long - but only if they are checked regularly and brought back to even tension. The control intervals should be at least annually, with high weight load of the wheel half-yearly.
- » When replacing spokes, the Poliax nipples must be used, so that the spoke gets the right direction to the rim.
- » If a spoke breaks, all the spokes must be loosened and retightened evenly with the new spoke. If your dealer no longer speaks himself, we can offer solutions.
- » The spoke tension should not be too strong and not too loose, i.e. medium hard. For Rohloff and front wheel engine, tighten slightly softer.

bicycle trailers

- » The powerful Utopia wheels are ideal for bicycle trailers. We recommend the Weber ER coupling for this purpose. It is fixed to the frame of the Rohloff drop-out. We do not recommend couplings for rear wheel axle mounting.

stem

- » The robust classic from Ergotec. With 4 screws you can change the angle and adjust the distance saddle - handlebar.

Stand on Rohloff dropouts

- » Classic Pletscher aluminium stand with high spring pressure. The Herrmans stand shoe provides a particularly stable stand.
- » Fold in the stand before starting, otherwise it will rap in the first left turn, which at least damages the screws, but also has a negative effect on driving safety.
- » The stand on the new wheel is usually a bit too long, which changes very quickly under load!

Colour and frame care

- » The paint also belongs to the „wear parts“. The surface of the paint is damaged by aggressive road dirt, salts and „stone chips“ (granulate). Salt then seeps through the small holes, causing rust to form under the paint after some time.
- » Regular cleaning and waxing, especially at the bottom of the bottom bracket, the lowest point, prolongs the service life.
- » If traces of rust (flash rust) appear on the paint, observe this as an early warning: Clean well, spray on clear lacquer and wax.

cradle step

- » It is very popular with racing bikes or MTB in sprint and mountain. For touring bikes with luggage and pedelecs, we expressly warn against riding the cradle properly.
- » The luggage can make it impossible to steer the wheel. It's gonna be dangerous. Also valid for pedelecs with battery and motor.
- » The bottom bracket is also subjected to a very high load during the strong cradle pedal. The sensor bottom bracket of the pedelec doesn't last long and breaks.
- » Our pedals (rubber block) are not suitable for weighing pedals. For this you need click pedals to prevent the foot from slipping off.

Tyre, tube, valve and rim tape

- » All tires are equipped with very good puncture protection, but are smooth running and comfortable.
- » The width of the tyres is decisive for the permissible total weight.
- » The permissible total weight is lower for narrow, harder tyres and higher for wide comfort tyres. The wide comfort tyres protect man and material from shocks.
- » Pay attention to the air pressure. About every 3-4 weeks you have to refill the pump, either at home at the floor pump with manometer or at the filling station.
- » The valve is a „car valve“ and therefore compatible with petrol stations.
- » Our hose is also from Schwalbe, the „AV 19“. It fits all 50-60 mm tires that Utopia uses. Please do not buy a replacement hose narrower than the „AV 19“.
- » As rim tape we stick a textile tape from Schwalbe on the rim. It does not have to be replaced when the tyre and inner tube are replaced, as long as it is not damaged. The adhesive prevents the hose from slipping and thus chafing through the edges.

repair a flat tire

- » In the event that your tyre has a „flat“, we will give you some tips on how to solve the problem:
- » You will need a repair kit with tyre levers and an air pump (a petrol station would be better).
- » Put your bike on its side.
- » Lift the tyre with the tyre levers sideways over the rim edge (not on the rear derailleur side) and pull out the tube. The valve remains in the rim.
- » The hose now hangs next to the rim. Inflate air vigorously. It doesn't matter to the hose if it is pressed a little on the brake. Now listen to the hose or feel with your hand where the hole is and the air comes out.
- » Roughen this area, apply the adhesive to the now empty hose, allow to dry, press on the patch firmly.
- » Then examine the coat at the point where the hole was in the hose. Remove foreign objects (glass or mandrel). This is very important, otherwise your tyre will be flat again.
- » Inflate the inner tube very lightly and push it under the tyre until it slides well into the rim bed. Then press the tire from the valve all around into the rim.
- » Pump it up. There you go.

Special for the Pedersen Wheel

- » The adjustment of gears, brakes and E drive is the same as with the other Utopia wheels, the difference lies in steering and saddle.
- » Der Sattel ist auf einem kräftigen Band befestigt und kann durch Änderung der Spannung
- » can be adjusted in height.
- » It's like a hammock. We recommend a rather loose tension, one sits very relaxed upright in a light hollow. Tight tension can cause seating problems when driving for long periods of time.
- » When pedalling, the seat post suspension is not missed, because the leather saddle is like a movable tensioning fabric and can be individually adjusted to the desired comfort.
- » The 55 Big Apple tyres make driving quiet and pleasant even on bumpy roads.
- » In addition to the double seat post, the saddle is supported to the rear with two adjustable threaded rods. When adjusting, first loosen the screws on the threaded rods, then bring the two thin seat posts to the desired height. Finally tighten the threaded rods again. There you go.
- » The stem in the Pedersen is still in the classic 1" fork with angled cone clamping. It can be changed only little in the height, because the head tube is very short.
- » If you need the handlebar higher when driving, then better not change the stem, but use a handlebar that is not bent down, but rather straight.

Rohloff Dropouts

- » The Rohloff dropout is suitable for all types of gears and has been used on Utopia bikes for 20 years without any problems.
- » It has the great advantage that you can tension the chain by moving the rear wheel.
- » Part of the dropout is firmly attached to the frame and made of stainless steel, as the screws quickly scratch the paint.
- » The CNC precision milling allows it to absorb the full torque of the drive (gearshift).
- » The part that holds the axis is made of aluminium and is also CNC milled. It is screwed to the stainless steel part.
- » Stand and trailer coupling are also attached to the drop-out end.

Changes to the Bike

- » By replacing the Utopia parts with components that contradict the Utopia specifications for the model, the driving behavior and the permissible total weight of the model can be significantly changed.
- » If components other than those provided by us or additional accessories which impair the operational safety of the bicycle are mounted on a Utopia bicycle, the replacement and warranty claims expire. In these cases, the person who has attached these parts shall be liable. Please ask us before the exchange.

Operational safety for the following components

- » Forks, stem and handlebars, seat post, suspension, tyres, rims, bearings and cranks, brakes, luggage racks may only be fitted with components intended by Utopia Velo for this model.
- » In our order forms you can see the selection for the individual models.
- » We have tested the load capacity of our bikes with the specified equipment. When mounting components that have not been tested by us, we do not assume any guarantee for operational safety.

cleaning

- » Clean the frame with a damp cloth. You can use a mild detergent for dirt stains.
- » The rims can be cleaned with a damp brush with plastic bristles or a cloth (no wire brush!).
- » The saddle and the handles can be cleaned with mild soap and water.
- » Never use a high pressure cleaner or steam cleaner, rather garden hose with low pressure.

Bicycle crackling noises

- » In the Utopia Forum participants sometimes write about disturbances caused by crackling their bikes. Often the specialist dealer cannot offer a solution quickly. Such problems occur again and again, regardless of the make of bicycle. Here are a few tips that can help.
- » 1. crackling sounds often do not originate from where the ear locates them. Noise is transmitted through the frame, rim, etc.
- » 2. please test first if the noises occur only when driving or also when rolling. The former may refer to chain, bottom bracket, crank, pedals, saddle or seat post. The second on rim or spokes.
- » 3. First test the chain. If it is too tightly tensioned, quite annoying crackling noises occur. It should have at least 1-2 cm of play up and down. A chain that is too tight also destroys the sprocket and chainrings. The crackling noises are then a warning and an indication of incorrect installation. Unfortunately not all mechanics know this anymore.
- » Please read the QR-code text before you start to rebuild something.



Preparing the pedelec for starting

- » Attach the battery to the luggage carrier with the flap (key) open.
- » After locking, lock.
- » The battery must sit firmly in the luggage carrier, it must not shake.
- » If you push the bike quickly, switch off the drive. Otherwise the cranks could turn.

Torque in Nm for some screws

Brake lever on handlebar	5 Nm	Screws at drop-out	16 Nm
Brake on Canti base	7 Nm	Crank arm screw	33 Nm
stem clamp on handlebar	6-8 Nm	bottom bracket cups	30 Nm
Speedlifter Allen screw	5-7 Nm	rear light on luggage carrier	4 Nm
VR engine pedelec	32 Nm	Carrier on frame	5 Nm
Rohloff hub clamping axle	7 Nm	Pedal	12 Nm

Notes on the pedelec

The engine that depends on you.

- » You can ride a Utopia pedelec the way you have ridden a bike so far. The electronics adapt the driving behaviour to your driving style.
- » The drive is controlled by sensors according to your driving behaviour. With it you ride on your Utopia pedelec in the same way as before on your bike, but more relaxed and lighter. They determine the driving behaviour of the drive.
- » The information for your drive comes from cadence and force sensors. They determine the motor power via algorithms in the controller.
- » It's four-wheel drive. Drive the rear wheel as usual with the assistance of the gearshift. The front wheel is driven by the engine.
- » Traction control ensures driving safety.
- » The drive supports you up to 25km/h.
- » The drive is suitable for Utopia wheels with permissible total weight up to 200 kg.
- » There are programs for different routes, e.g. program 9 for high mountain tours. This makes it possible to travel on inclines of 10-20% with luggage. The powerful front motor pulls them up.
- » Der Motor läuft nur, wenn Sie die Tretkurbeln move. That makes the bike a pedelec.
- » Legally speaking, your Utopia pedelec remains a bicycle and may be ridden on roads, cycle paths, forest paths or hiking trails without permission or insurance number plates.
- » The battery has a button on the lower right side and 5 LEDs for the charge level indicator. When charging, the charge level is constantly displayed.



Display on handlebar

- » For motor and light control.
- » The illuminated buttons are easy to operate, even with gloves on.
- » At the bottom is the start button, in the middle the buttons for motor stages 1,2,3. At the top the starting aid and above it the battery charge level indicator.
- » The light sensor in the upper left corner automatically dims the light intensity in the dark so that the displays do not dazzle.

Bags and batteries on luggage carrier

- » Controller and batteries are integrated in the luggage carrier. Packing bags fit on the carrier.
- » For bags that do not fit, there is an additional bracket that is optimal for all bags.
- » It can easily be retrofitted (see page 4).

Who is the manufacturer of the drive

- » Van Raam, the Dutch manufacturer of special and therapy bikes, has been developing and continuously improving this electric drive together with Utopia Velo since 2008.
- » Hardware, software and battery are manufactured exclusively in Holland and Germany.

Infos on display

Control and error indication on the display.

- » Hall Error = A fault in the power supply to the motor that usually causes knocking or vibration in the motor. A cable or plug is probably defective. Or - very rarely - a Hall sensor in the engine has failed and the controller cannot see the signals.
- » Temperature fault in the controller. Please continue slowly to step 1 or 2.
- » Overvoltage is usually caused by too high a speed downhill. As a rule, the controller solves the problem by switching off the motor (light continues to burn). At 23-25 km/h the engine starts again. When you keep pedaling, it's all normal.
- » Mount mode is an error that occurs on new displays when the board falls back into programming mode. The display must then be replaced.
- » Undervoltage is present when the battery voltage is too low. The support is then switched off. The battery must be charged immediately.
- » Overcurrent is rare. Here the battery and controller have too much power. If you switch off and on again after 1 minute, the bike will ride normally.
- » Error in infrared communication between battery and controller. The drive does not fail, the bike works otherwise perfectly, only the display shows the error code.

Display with operating and error indication

Hall Error	●●●●●	1	2	3
Temperature fault	●●●●●	1	2	3
overvoltage	●●●●●	1	2	3
Display Mount - Modus	○●●●○	1	2	3
undervoltage	○●●●○	1	2	3
About electricity	▨▨▨▨▨	1	2	3
No IR communication	▨▨▨▨▨	1	2	3
Speedlimiter aktiv	●●●●●	1	2	3
Stage 1 activated	●●●●○	1	2	3
Stage 2 activated	●●●○●	1	2	3
Stage 3 activated	●●○●●	1	2	3

Notes on the speed limiter (white):

- » Speedlimiter is the speed limiter.
- » It is switched on by pressing the push button for a longer time while driving.
- » That freezes the current speed as max. speed, so the engine switches off before 25km/h.
- » By pressing button 1 or 2 the normal condition (25km/h) is restored.

Motor stages (white):

- » Schalten der Motorstufe 1, 2, 3.
- » Press the button to activate the desired motor stage.

- » Attention: We always supply two protective caps for the contacts on the side of the controller. Please attach these so that the contacts are protected when no battery is attached.



Operating elements on the controller

- » The toggle switch on the controller has a middle position. This „0“ position means: No actuator.
- » Tilt the switch to the left or right, depending on where the battery is located.
- » You can switch to the other battery at any time. To do this, switch off the engine and please dismount.
- » After switching over, the capacity of the last used battery may be shown for a few minutes.

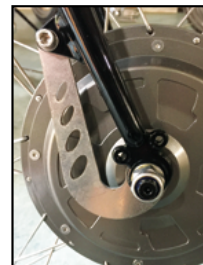


Control elements on the display

- » Start button - - on the display to start the drive, it starts in stage 1.
- » Press and hold to turn off.
- » If the battery is still in deep sleep, the display flashes briefly.
- » Then repeat the start 1-2 times until the LED lights up.
- » If the system is not in use, it will shut down after 5-10 minutes.
- » In start mode, the start button flashes blue - - briefly to indicate that Bluetooth is working.
- » When the system starts, the battery indicator and motor level 1 light up on the display.
- » The engine starts only by pedalling. When the crank stops, the engine stops immediately.
- » Together with the drive, the light always switches on.
 - » This gives you control over whether the light is working when you start.
 - » By briefly touching the start button a second time, you switch off the light.
 - » If you switch the light on again, the engine switches off, with it you drive without engine, but with light
 - » With this setting, the distance travelled is also stored in the controller in „total kilometres“.
 - » You can switch the motor on again directly by pressing button 1 or 2.
- » **Attention:** The current for your light always comes from the battery. This means: No battery = no light.
- » The display has an automatic dimming function. By means of a light sensor, the light on the display is automatically dimmed when it gets dark to prevent glare at night.

Motor and Controller

- » Direct Drive motors have no gears and are almost maintenance free.
- » Spray housing with Ballistol or Vaseline to protect against rust.
- » Bearing damage is rare. However, the bearings are easily replaceable.
- » The torque arm on the right side must be firmly screwed on.
- » Motor cable must not be crushed, lay in wide bends.
- » The plug of the motor cable is to be serviced during the annual inspection.
- » The engine is insensitive to rain when driving and standing. Please be careful when transporting on car carriers in the rain, then drive 1-3 km, so that the water can run out of the engine again.
- » Never clean with a high pressure cleaner.
- » The controller is on top of the carrier. It's waterproof and sealed.
- » Overvoltages occur at engine speeds above 345 rpm (revolutions per minute) and more than 48km/h. Do not drive faster than 50km/h
- » The Direct Drive motor generates more voltage in the high speed range (45-55 km/h) than the battery can hold.
 - » The controller then switches off the motor control circuit. The 3 motor LEDs are dark.
 - » After lowering the speed in the range of 23-25km/h the drive becomes active again. As a rule, one does not notice these transitions, because the lamp in front keeps on burning.



Sensors in the bottom bracket

- » The bearings and sensors are protected in the steel housing and lubricated for life. The fibreglass threaded shells fix it in the frame.
- » The threaded shells are secured with special adhesive and are tightened on the right side.
- » **Attention:**
 - » The left shell must not be turned under any circumstances. When turning, the cables break off.
 - » The cadence and force sensors are waterproof, two cables lead to the controller.
 - » The „man-style“ starting and the cradle step can destroy the sensors.



Battery with charge level indicator and telematics

- » The Rosenberger charging socket with magnetic contact is at the top on the side. There is no current on the pins until the plug connection is closed.
- » This charging contact does not require a sealing cap. If there is too much road dirt in the plug recess, clean with a toothbrush.
- » Charging should only be done with the battery removed.
- » The battery is equipped with GPS and Telekom SIM card for theft protection and remote maintenance.
- » The average range in engine stage 1 is 40-80 km. It depends on various factors: Weight of the driver and the load; driving speed; selected support level and program; fast or slow step; ambient temperature; wind force; tyre pressure; battery capacity and voltage.
- » Each battery discharges itself during storage, according to experience about 4-7% per month. This process is referred to as „self-discharge“. This is normal for lithium ion cells.
- » If the battery is empty and is not being charged, a deep discharge may occur due to self-discharge. This means that this battery can no longer be charged. In the event of such a deep discharge, the guarantee expires.
- » Please note that each battery will become weaker over time. This degradation of the battery is unavoidable. The more frequently a battery is (temporarily) charged, the longer its capacity will last. When the battery is not in use, the capacity decreases faster. Long service lives usually shorten the service life.
- » On average, the battery loses 1-3% capacity per year and has an average life - or service life of 5-7 years.

Tips for handling the battery

- » Important: Only open the battery door with a key and generally only remove and insert it with the door open.
- » To charge, remove the batteries from the wheel. This protects the controller from overvoltages in the power line. Only charge the battery on the wheel in exceptional cases.
- » Never run the battery completely empty. With a red LED you can only drive on stage 1, otherwise the drive switches off.
- » You should switch off at the latest at 20% residual charge, i.e. at the last green dot, before the transition from green to red.
- » As an exception, you can drive the battery up to 9%, better not too often.
- » The capacity of the battery is reduced more quickly with frequent emptying.
- » Frequent intermediate charging before/after each trip prolongs the life of your battery.
- » Please never wait until the battery is completely empty. I'd rather load earlier.
- » If the battery is almost empty (less than 12%), it must be charged within 2 days.
- » When transporting bicycles by car, the batteries must be removed and placed in the car.
- » If there is no battery on the wheel, place the black cover caps on the connectors on the controller.
- » The batteries need a temperature of 12° - 25° for storage and charging.
- » When riding in cold weather with 2 batteries on the bike, switch over approx. every 10-15km so that the 2nd battery can warm up when riding. (See page 12)
- » The battery goes into deep sleep after 2-4 hours of inactivity to save power.
 - » He must then be awakened before use.
 - » To wake up, press the button at the bottom of the battery next to the charge level indicator.
 - » Without waking you have to press the start button 2-3 times until the battery is awake.
- » If the battery is stored for a longer period of time, it should be about 60-70% charged and recharged after 3 months at the latest. More frequent short loading is even better.
- » Recommendations in the press to charge the battery only 3/4 of the time are only correct if it is stored for a longer period. Before use it can be 100% loaded without any disadvantages.
- » The battery must sit firmly in the luggage carrier, it must not shake.
- » The carrier and battery are well adapted to each other.
- » Please note in case of subsequent purchase or prolonged use:
 - » The holder at the bottom of the carrier can be adjusted in height by 2 countersunk screws.
 - » You can adjust the height with a 2.5 mm Allen key.
 - » The screws must then be provided with a medium-strong screw lock again.

Consumption display	
100% - 84%	●●●●●●
83% - 68%	●●●●○
67% - 51%	●●●○○
50% - 34%	●●○○○
33% - 17%	●○○○○
16% - 10%	●○○○○
9% - 0%	●○○○○

Display on battery

Information from the battery

- » If the remaining capacity exceeds 9% (red flashing LED), the motor no longer receives current. Only the front and rear lights get electricity after about 2 hours. You can continue to drive with the lights on without assistance.
- » You get light while driving for about 2 hours. The power for it is supplied by the battery.

LED Felder am Akku Laden, Entladen und Fehleranzeige	
0% - 16% (Entladen)	●●●●●
17% - 33% (Entladen)	○●●●●
34% - 50% (Entladen)	○○●●●
51% - 67% (Entladen)	○○○●●
67% - 84% (Entladen)	○○○○●
84% - 100% (Entladen)	○○○○○
0% - 20% (Laden)	○●○○○
20% - 40% (Laden)	●○●○○
40% - 60% (Laden)	●●○●○
60% - 80% (Laden)	●●●○●
80% - 100% (Laden)	●●●●○
100% (Laden)	●●●●●
BMS Error	○●○○○
Temperatur	○●○○○
Strom (bereits voll)	○○●○○
Spannungs Error	○○○●○
Batterie verschlossen, entladen nicht möglich	○○○○○

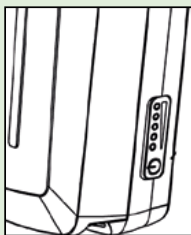
Error messages from the battery

- » It is important that the battery does not have to be replaced for all faults. With most errors, the battery is briefly reset, i.e. it fails and then functions normally. If the LEDs continue to blink, the battery must be sent to us.
- » **BMS Error:** If the first LED flashes, the battery is empty or there is a BMS error.
- » **Temperature:** The second LED of the battery indicator indicates a temperature error. Both during unloading and loading.
- » **Current:** The third LED flashes only if there is a current fault. Possibly due to short circuit, too high charge current or too high discharge current.
- » **Voltage:** The fourth LED flashes only if there is a voltage error. This could be too low a voltage or too high a voltage.
- » **Battery locked/discharge not possible:** If the fifth LED flashes, the battery is locked or the chemical fuse has blown.
- » It is possible that LEDs flash simultaneously because several errors occur simultaneously. For example, if the battery is deeply discharged, LED1 (BMS error) and LED4 (voltage error) flash.

Notes on Using the Battery

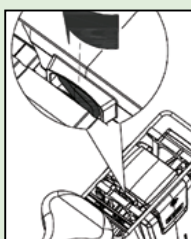
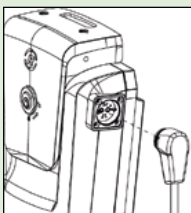
charge indicator

» The battery has a button at the bottom side and 5 LEDs for the charge level indicator. When the battery is being charged, it is always shown here how far the battery has already been charged.



Rosenberger Loading System

Insert the Rosenberger magnetic plug. The vertical position is important so that the magnetic plug is seated correctly.



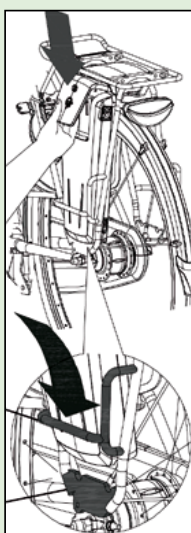
Controller toggle

On the front side of the controller is the switch to select the right or left battery or to lock the system in the middle „0“ position.



Removing the battery from the Bike

Remove the battery for charging, storage or transport. First unlock, then open the flap, tilt the battery forwards and pull it upwards.



Replace the battery

First unlock, then open the flap and place the battery on the bottom of the rail. Press the battery into the contacts on the top of the controller and lock it again. The battery must not wobble, it must be firmly seated.



Cover controller contacts

To prevent the contacts from getting dirty without the battery, always attach the protective caps supplied.



Charger with 6 A

- » The cells in the battery are suitable for the 6 A fast charger.
 - » The charger has no active cooling (fan), but cools itself.
 - » It gets as warm as a teacup. If it gets too warm, it shuts down.
 - » Never load in the sun or directly on the heating.
 - » Please ensure fresh air supply. At a charger temperature above 40° the charging process stops.
 - » The charger can be carried in panniers. But never leave in bags to shop!
 - » Never use neoprene or anything similar around the battery when riding a bicycle. Not even in winter.
- » **Caution: Always start loading in this order:**
 - » 1. the charger must not yet be connected to the mains!
 - » 2. insert the Rosenberger plug into the charging socket to charge.
 - » 3. Insert the 3rd Rosenberger magnetic plug. The right position is important.
 - » For the plug to fit correctly, the cable must point downwards. (see fig.)
- » Now plug the power plug into the socket. The charger then starts automatically, the green light turns red!
- » Red on the charger indicates that charging is in progress. It's green when it's on the grid, but it's not charging.
- » You can interrupt charging at any time and terminate it by unplugging the mains plug. Then remove the magnetic plug as well.
- » During charging, you can observe the charging progress by means of the LEDs on the battery.
- » If you want to charge to 100%, you must leave the charger connected to the battery until the LEDs on the battery no longer light up and the charger shows green.
- » However, you can abort earlier at any time if, for example, the LEDs on the battery are dark.
- » **Attention:**
 - » Load only on wood, stone or metal plate, not on paper or fabric ceiling. Always away from curtains.
 - » Only load indoors.
 - » Do not expose to rain, protect from moisture.
 - » Always be near the charger when charging, disconnect the battery from the charger after charging.
 - » No oil or grease on the contacts. Do not place the Rosenberger plug on a metal plate, it is magnetic.



motor stages

- » Stage 1 - For normal driving on flat terrain up to slight gradients. Current up to approx. 5 Ampere.
- » Stage 2 - For gradients, headwinds, to accelerate. Current up to 11 amps.
- » Stage 3 - For steep downhill sections and ramps. Current up to 22 Ampere.
- » In the app you can see how much ampere current the motor consumes. About 90% of them arrive on the road.

speed limiter

- » With the Speedlimiter you limit the engine power to a lower speed.
- » If you press the sliding aid while driving, then the max. speed is set to exactly the value you are currently driving.
- » The lights of the motor stage go out, it continues in the last used motor stage.
- » If you press step 1 or 2 while driving, the limitation will be terminated.
- » When the speed limiter setting is terminated, the lights of the motor stage also switch on again.

Starting aid, pushing aid and moving up stairs

- » When climbing up or starting while sitting, you can be supported by the starting aid.
- » The sliding aid on the display only works when the drive is switched on. Tractive force and strength depend on the choice of motor stage. As long as you press the button, or up to 4/6 km/h are reached he drives.
- » Stage 1 - Starting and pushing aid up to 4 km/h in the flat.
- » Stage 2 - Starting aid up to 6 km/h and pushing aid for stairs.
- » Stage 3 - More powerful starting aid up to 6 km/h for inclines and pushing aid for stairs.

Tips for climbing stairs

- » You go up the stairs next to the wheel and press the push button with one hand.
- » With the other hand, push the bike forward slightly on the handlebars.
- » Always keep your fingers on the front brake handle.
- » This is important to quickly stop the bike or prevent it from rolling back when the engine stops if your finger slips off the button.
- » Our recommendation is: First practice on a small, short staircase.
- » Luggage at the wheel must be distributed in front and behind, otherwise it does not go with the stair driving.
- » **Attention: If stairs are wet, especially in railway stations, it is better to remove your luggage.**

Utopia breaks new ground in mobility

- » For 20 years we have been working to make electric bicycles a versatile and safe means of transport. The direct communication with our customers by means of remote maintenance of batteries and electronics became more and more important. These are the prerequisites for the Utopia Pedelec to drive reliably, whether in everyday life or on holiday.
- » The intelligent networking of pedelecs started 4 years ago with the Utopia App. In the last 12 months the portal with recording of driving activities and theft protection was added.

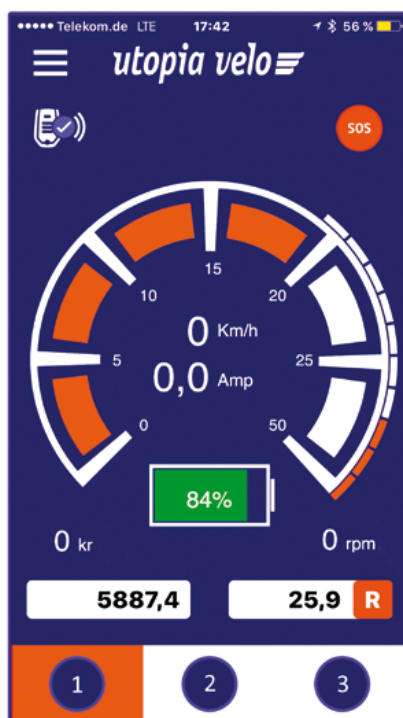
Remote maintenance and anti-theft protection

- » Via remote maintenance we can quickly diagnose the controller, motor, display and sensor bottom bracket when you drive with the Utopia App. Remote maintenance of the battery is possible without an app with the telematics card integrated in the battery. This is independent of location or country.
- » Please report a theft using the QR code on the left, so that we can activate the theft protection.
- » The QR code will take you to the form where you can provide us with all the information you need quickly and easily.
- » If this is not possible, then please send us the frame and battery number as well as the e-mail address with which you are registered in the app by e-mail.
- » This data is not linked to the pedelec data for data protection reasons and must first be brought together by us.



Service from the Utopia App

- » The app has many functions that support riding and the entire use of the bike.
- » It gives you the security of being supported at all times on your holiday tour.
- » In Dashboardden sehen Sie: Geschwindigkeit, Motorleistung, Kilometerstand, power consumption and battery capacity.
- » The display of the ampere power is comparable to a tachometer on a car. By the live display of the current consumption in the motor (A) you can recognize your performance. They increase the power consumption and thus the motor power through more power and higher cadence. You determine the pedelec performance, the app gives you the overview.
- » This allows you to plan how much electricity you will consume on the route.
- » With controllers from January 2016, information for a complete service diagnosis can be stored in the portal.
- » If you press the SOS button, an automatic SOS SMS will be sent to a trusted phone with GPS exact location.
- » The app records driving activities with time and kilometers and shows them in the portal. If you do not use the app, nothing will be recorded. You won't see anything in the portal.
- » You are best protected against data theft and misuse, your name is not transmitted or stored, but only the frame number.



The dashboard is always displayed while driving.
While driving, you cannot switch to another app page for safety reasons.
This is only possible while standing. In the dashboard you can see all important information:

Left display	Center display	Right display
» Menu, for further pages	» Program display and more	» SOS emergency call
» End Bluetooth connection	» Speed Graphic Orange	» Power consumption graphic live
» Step force live	» Speed in km/h	» Cadence live
» total kilometres	» Power consumption in A live	» trip per day
» Motor stage 1	» Motor stage 2	» Motor stage 3

Set Utopia Velo App

Download and register the Utopia Velo App

- » Download Utopia App for free: For Android in the Google Play Store, for iOS in the App Store.
- » After you have downloaded the Utopia Velo App, you need to log in.

Login to Utopia Server

- » You need an internet connection.
- » Open the Utopia Velo App on your smartphone. Then you can log in with your e-mail address and a password.
- » The mail address should be active in the smartphone.
- » You will then automatically receive a mail with a link for registration. Please confirm right away. We can continue a little later.
- » If you do not receive this mail, please check the spam folder. No registration is possible without confirmation.

Connect your bike to the app

- » Select your bike now. Please note that the bicycle must be nearby and the drive must already be switched on.
- » In the menu „Bicycle selection“ click on „Add bicycle“.
- » Enter the frame number in the input window.
- » By entering the correct frame number you can see the corresponding bicycle model and select it by clicking on it.
- » If the field with the bicycle name becomes orange during the „Establish connection“ display, then touch it with your finger. A blue check mark appears in the field to indicate that the Bluetooth connection is working.
- » Now data is still being transferred. Then the dashboard appears. Finished
- » We wish you all the best: Enjoy driving with the Utopia App.

If not immediately connection comes

- » It may be necessary to try several times to establish the connection, this varies depending on the smartphone.
- » To do this, close the app and the display and restart.
- » Please note: You can register several frame numbers on several mobile phones with one mail address. The same mail address is important.

Switch off

- » As long as you are connected, you will see a blue check mark in the top left corner of the dashboard, the icon of the active Bluetooth connection.
- » If you want to close the app, click on this field and confirm the close.
- » Only with this sequence the app saves all settings and the daily kilometres.
- » Only then end the app by wiping it away.

Set Utopia Velo App

- » To restart the app you do not need to enter the password anymore, you remain logged in to the Utopia server.
- » The next time you dial in, just click on the bicycle when setting up the connection.
- » However, if you go to Logout in the menu, the connection to the server will be terminated and you must be connected to the Internet when you restart and log on again with your password and e-mail address.
- » Better use the logout only if you don't want to use the app for a long time.

Smartphone settings

- » Enable Bluetooth in your phone.
- » Internet connection via „mobile network“ must always be available when logging in, when logging in later and when selecting a program.
- » Set the location setting to „always“.
- » Driving activities and diagnostics are sent several times to the server. If there is no Internet connection, it is cached. The storage capacity depends on the smartphone and may be limited.
- » If the power saving mode (iPhone) is to be activated, then always activate it first, then start the app. Otherwise the app will shut down too quickly.
- » To change programs, you must have an Internet connection. The desired program is loaded from the server in the latest version.
- » The app is compatible with Google Maps. You will then hear the route instructions in the background.
- » You can switch to View with both apps.
- » The Utopia app could be disturbed by other programs that also need Bluetooth, better close such programs.
- » If you have the app in the background, the connection remains. After 10 minutes in the background you have to go to the bike selection page and select the bike again, then the connection comes back. The controller continues to store your kilometres and then displays them again in the dashboard for total kilometres.

Access to the Utopia Portal



- » Prerequisite is that you are registered in the Utopia Velo App and are using it.
- » Due to poor Internet transmission, it can sometimes take a day for the data from the last trip to appear in the portal.
- » You log in with your Utopia App access.

Updating Programs for Controllers

- » The app currently displays 9 different driving programs: From the energy-saving to the very fast mountain program.
- » The programs are suitable for different habits and different routes up to the high mountains.
- » If the app is connected to the bicycle and there is Internet contact, you can download the desired program from the Program menu. The loading takes about 1 minute and is terminated with a confirmation that the new program is loaded in the controller.
- » The addition „Pedelec“ in the program name indicates that there is a constant support of the engine at slow driving speed. That's ideal for low cadence.

Driving programs in the Utopia Velo App

1 - Standard

- » Average power, usually sufficient for speeds up to 25 km/h, ideal for cadence 60 or higher.

2 - Standard pedelec

- » Medium power, usually enough for speeds up to 25 km/h, ideal for slow cadence.

3 - Fast

- » High performance, especially in low mountain ranges, higher power consumption, good at fast cadence and heavy loads.

4 - Fast pedelec

- » High performance, especially in low mountain ranges, higher power consumption, good at lower cadence and heavy loads.

5 - Save electricity

- » Driving with lower power consumption, i.e. for greater range. Good for slower driving.

6 - Save electricity Pedelec

- » Driving with lower power consumption, i.e. for greater range. Good for slower, quieter riding with lower cadence.

7 - Lowest power consumption

- » Technically lowest possible power consumption, highest range with slow driving or tailwind.

8 - Highest performance

- » Driving with luggage and/or in the mountains. Due to very high power consumption only useful with two batteries.

9 - High mountains

- » Program 9 is new. Ideal for the high mountains with short gradients of 10-15%. This applies to stage 3. Motor stages 1 and 2 also have a higher amperage here. The power consumption in program 9 is very high. You should really only use level 3 for very steep stretches. In stage 3, slight engine noise and vibration may occur at 8-9 km/h.

Telematics card in battery

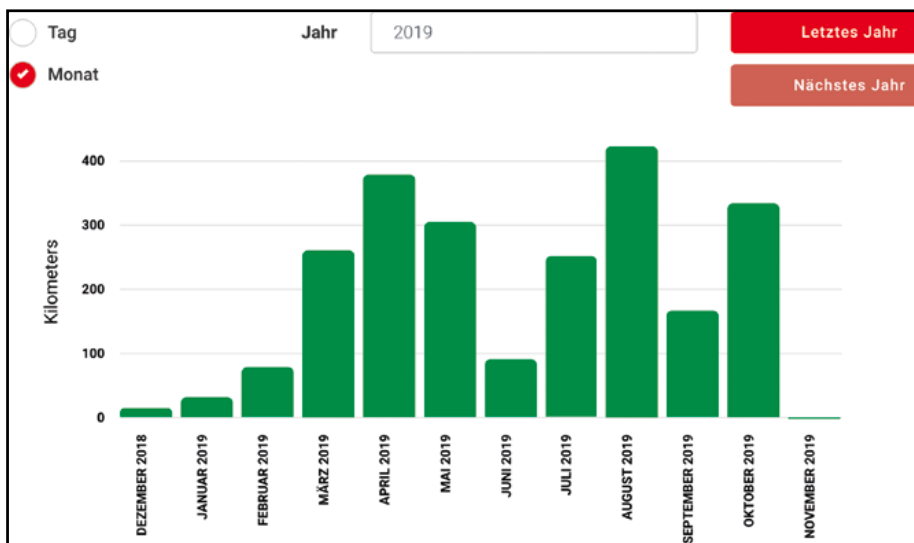
- » All batteries since April 2018 with start no. 610... have a Telekom prepaid SIM card with GPS tracking, which is paid for 2-3 years.
- » Therefore, the Utopia Portal gets its battery data and is independent of app usage:
 - » Diagnosis of the battery with all data of the cells, of the BMS and of course also of the capacity.
 - » Location data every 12 hours for theft protection
 - » To determine the location, you can forward the data for Google Maps from the Utopia Portal to the police.
 - » Automatic updates for BMS and telematics will soon be possible via the telematics card.

The Utopia Portal

- » In the portal you can read the data of your bicycle from the Utopia App:
 - » You see the diagnosis of controller, motor, cable from the data of driving with the app.
 - » You can see the routes you have travelled with the app and the active smartphone. With time, distance, kilometers and time. The routes are recorded by the GPS smartphone.
 - » You see the data of the battery with location determination of the GPS transmitter in the battery telematics.
 - » In the event of theft, the wheel can be described as „stolen“. The location will then be sent at shorter intervals.
 - » You can then identify the location in the portal itself and pass it on to the police.
- » The portal is free in the introductory phase until 31.12.19 with all functions.
- » Subsequently, a monthly subscription can be set up on request. The diagnosis is free of charge within the two-year warranty period.
- » The display of driving activities and the anti-theft function are free until 31.12.19 and can only be used with a subscription.

- » For buyers of a new Utopia Pedelecs, all portal content is free for 3 months.
- » The subscription prices include driving distances, theft protection and diagnosis as well as remote maintenance.
- » Utopia will publish the cost of a subscription on the Internet at the end of the year.

» Picture from portal: Display of the driven kilometres.



Special instructions for the pedelec

- » If the wheel is transported on the rear of the car carrier in the rain, it must then be driven 1-2 kilometres so that the absorbed water can run out of the engine again. You can only do that in driving mode. If the bike is not ridden, the water remains in the engine, which rust and is permanently damaged.
- » Devices with radio technology (radio speedometers) can cause malfunctions. Do not mount on the wheel.
- » Do not install cadence sensors in the bottom bracket area, the magnetic field disturbs the sensors on the wheel.
- » Never cover the controller. He always needs an air gap of 1.5 cm for cooling.
- » The bicycle can be ridden at -20° to +40°. Under 10° and over 30°, however, the battery performance becomes weaker.
- » A pedelec should only go downhill at a maximum speed of 50 km/h, not faster. Not even when the engine is switched off.
- » Hands-free driving is not possible, one hand must always be on the handlebar.

Repair and inspection at Utopia

- » We carry out repairs and inspections here in the assembly plant in Saarbrücken.
- » If you have any technical questions or complaints, please always send us an e-mail with a detailed description and the frame and battery number. If possible, also with photos, then we can better estimate the error and try to find solutions.
- » If necessary, we can have your bike picked up or you can bring it to us. Always send the battery along with the charger, if necessary.
- » We charge for outward and return transport.
- » If required, we can also send you a cardboard box free of charge to pack your bike.
- » We'll check your pedelec here and see what may be causing the problem. Afterwards we make your bike ready to ride again.
- » If it concerns only the battery, then please mail the data first. Only if necessary and agreed upon, also send the battery well packed to us.
- » For all shipments to us, clarify beforehand whether you want to send. Remote maintenance often makes it unnecessary. We make every effort to check the battery or wheel as quickly as possible and to rectify any problems.

Warranty and information on pedelec technology

- » Utopia gives 2 years warranty on the drive with motor, battery and charger.
- » The battery has a capacity guarantee of 80% in the first 2 years.
- » You will find a technical and warranty description in the online and printed bike guide. Please use the QR-Code to go to the corresponding website.
- » In the portal you can log in with your app user name (mail address) and password and then see your pages and data.
- » From 2020 partly with registration via a subscription system.



Battery in frost and heat



This photo was taken at -4°. Everything was covered in hoarfrost. The batteries were previously stored in a warm room. The bike started immediately and then drove 53 km without stopping to the finish.

Observe at cold

Wenn die Akkus längere Zeit bei Temperaturen nahe dem Gefrierpunkt aufbewahrt werden, verlieren sie an Kapazität.

At temperatures below 0°C, they can be deeply discharged in a few hours, as the electrochemical processes are slowed down too much.

Driving in the cold is not a problem because the battery warms itself when it is active.

At low temperatures the range decreases by 10-30%. Better not drive long in level 3.

The sun in the picture below radiates warmth, but it was -3° at wind force 6-7 in Niendorf at the Baltic Sea, the destination of the tour.

Wheel and battery worked well in the cold, only the iPhone switched off and had to warm up in the bag.

In heat

Bei extremer Wärme kann der Akku ebenfalls gestört und schnell zerstört werden.

When driving, the heat plays no role as long as the battery is cooled by the airstream. When standing with solar radiation above 30° the cells can heat up too much and then fall out.

If the batteries remain on the wheel, then always put them in the shade or remove the batteries!



Impressum

Utopia Velo & Pedersen Manufaktur

Inge Wiebe & Ralf Klagges GbR

<https://www.utopia-velo.de>

<https://www.pedersen-velo.de>

Mail: info@utopia-velo.de

Mail: info@pedersen-velo.de

Tel: 0681-970360

Utopia Velo • Kreisstr. 134 F • 66128 Saarbrücken

Copyright für Display- und Akku-Zeichnungen by Van Raam



conformity

Utopia Velo as manufacturer declares that the Utopia Velo bicycle or pedelec as described in this manual is manufactured according to the specifications for bicycle ISO 4210-2 and pedelec EN 15194-2017 according to the current Machinery Directive. The products are tested. The pedelecs are tested by Extra-Energy.

The CE Declaration of Conformity is attached.

or to download:



General information

This manual contains important and necessary information about the use of your bicycle. Please read these instructions carefully before using your bike.

Please note: The description applies to pedelecs with controller V5 (Jan 19) and firmware 2 (Sept.19). For the older controller V4 (Jan.16) there are only similarities. We recommend an update to Controller V5.

Scope of delivery

Check the delivered bicycle immediately after receipt.

In case of damage or incomplete delivery, please contact your dealer or Utopia Velo immediately.

For all models

- Bicycle with packaging
- instruction manual
- Utopia folder with instructions from some major component manufacturers.
- 2 spare spokes with Poliax nipple for the rear wheel.

Accessories only for pedelec models.

- 1 charger
- 2 caps for controller
- 2 Battery key
- CE Declaration of Conformit



Service form, maintenance and adjustments

In order to maintain the warranty claim, service work on the Utopia Velo must be carried out regularly.

Inspection:	Performed on:	Stamp/Signature of the dealer
Inspection 1 year after delivery		
Inspection 2 years after delivery		
Inspection 3 years after delivery		
Inspection 4 years after delivery		
Inspection 5 years after delivery		

We recommend that you inspect your bike annually, regardless of the warranty claim.

Changes to the bicycle

The following components have been modified on the bike:

Changed:	Performed on:	Performed by:

Attention! If modifications are carried out by a dealer not authorised by Utopia Velo or if components not intended by Utopia Velo for this model are fitted, the warranty will expire. exception: If the modifications have been agreed in writing with Utopia Velo.



Registration of your bike with Utopia Velo

If you register your bike for free, you will gain security and exclusive service no matter where in the world your bike is located. The registration is the basis for consultation and long-term spare parts supply.



Siehe Utopia Internetseite:

Transfer/sale to a new owner

If you transfer your bike to a new owner, it is important that you provide all the technical documentation and spare keys so that the new owner can use the bike safely. Please let us know so that the new owner can register his bike with Utopia Velo.

Warranty and guarantee

The guarantee is a voluntary commitment of the manufacturer and covers defects caused by a material or manufacturing defect.

We give a five-year warranty on the frame and fork and a three-year warranty on paint on the frame. The warranty applies only to normal use and maintenance of the bicycle in accordance with these instructions for use.

The legal warranty of 2 years extends for the first purchaser to all material, production and construction faults in accessories and other components (excluding wearing parts). Wearing parts are covered by a special warranty. This is because wearing parts are not covered by the warranty if they are „worn out“ due to use.



Siehe Utopia Internetseite:

Please note

Both the warranty and the product liability in general expire, if the instructions in these instructions for use are not observed, if improper maintenance work has been carried out or if technical Modifications or additions to the bicycle with non-original parts and without the written consent of Utopia Velo.

Furthermore, the original CE declaration for the pedelec expires in the event of changes made by third parties.

content

Read before first ride	2
Ascending and starting	2
Seat position and seat post	2
Permissible total weight of your bike	2
Important safety instructions	3
Wear parts	3
The correct tension of the chain	4
Chain care and life expectancy of the chain	4
Luggage carrier	4
Cradle step	5
Tyre, tube, valve and rim tape	5
Tire puncture repair	5
Special for the Pedersen Wheel	5
Rohloff Default	6
Modifications to the wheel	6
Operational safety for the following components	6
Cleaning	6
Bicycle crackling noises	6
Torque in Nm for some screws	6
Preparing the pedelec for starting	7
Operating elements on the controller	7
Operating elements on the display	7
Motor and controller	7
Sensors in the bottom bracket	7
Battery with charge level indicator and telematics	8
Tips for using the battery	8

content

Charger with 6 A	9
Motor stages,	9
Speedlimiter	9
Starting aid, pushing aid and climbing stairs	9
Tips for climbing stairs	9
Utopia breaks new ground in mobility	10
Remote maintenance and theft protection	10
Service from the Utopia App	10
Update programs for the controller	11
Driving programs in the Utopia Velo App	11
Telematics card in battery	11
The Utopia Portal	11
Special information about the pedelec	12
Repair and inspection at Utopia	12
Warranty and information on pedelec technology	12
Imprint	12
Conformity	13
General Information	13
Delivery	13
Service Form, Maintenance and Adjustments	14
Changes to the bike	14
Register your bike with Utopia Velo	15
Transfer/sale to a new owner	15
Warranty and guarantee	15
Please note	15



The new Pedersen as bicycle and pedelec at the Utopia Summer Festival 2019



utopia-velo.de

Pedersen Manufaktur