

**huka**  
BIKES



Orthros  
manual

[illegible]

WWW.HUKA.NL/WARRANTY



## Congratulations on your new Orthros

Do you want carefree cycling? With the Orthros, we want to make your world easier. You'd probably rather go cycling than read the manual. Therefore, we have put together a manual containing the most important and necessary information on how to use the Orthros safely. Read this manual carefully before using the Orthros and always follow the instructions in the manual.

To make the best use of your bike, I sometimes give you a tip so that you can continue to cycle safely and with pleasure.

We would love to hear about your experiences and where you like to cycle. Would you like to share with us on Facebook? We'd love to hear from you!



**Kevin**  
Maker of the Orthros

# Content

<b>Your notes .....</b>	<b>2</b>
<b>General.....</b>	<b>7</b>
Indication & application.....	7
Warranty.....	8
EU declaration of conformity.....	10
<b>First bike ride on the Orthros .....</b>	<b>11</b>
Safely on the road.....	11
Boarding and cycling.....	13
Brakes .....	14
Parking brake .....	14
<b>Product description.....</b>	<b>16</b>
Wheels and tires .....	16
Spokes.....	17
Chain guard & chain.....	17
Brakes .....	18
Bottom bracket, crankset and pedals .....	18
Gears.....	19
Chair.....	19
Handlebar .....	19
Mudguards.....	20
Lighting .....	20
Luggage carrier .....	20
Electric pedal assistance .....	21
Pass Vario pedal assistance .....	21

Pedal-assisted bicycles.....	21
Display.....	22
Function walking support .....	22
Accessories .....	23
Assembling parts.....	24
<b>Optimal use .....</b>	<b>25</b>
Seat depth adjustment .....	25
Adjusting handlebar height .....	26
Adjust steering angle .....	27
Handlebar stem with quick-release device .....	27
<b>Maintenance Orthros.....</b>	<b>28</b>
Cleaning .....	28
Tire pressure and tread .....	28
Fixing a flat tire .....	29
Wheels .....	30
Spokes.....	30
Chain .....	30
Brakes .....	31
Battery charging.....	31
Replacement of parts .....	33
Lighting .....	34
Moving the bike .....	34
<b>Specifications.....</b>	<b>35</b>
<b>Other information.....</b>	<b>37</b>
Contact details Huka.....	37

Changes.....	37
Sale of the Orthros.....	38
Product disposal .....	39
Recycling the battery .....	39

# General

## INDICATION & APPLICATION

The Orthros is a duo bike where the driver and co-driver sit side by side. In this position, the driver has a good overview of the road and also good contact with the co-driver. The bike is specially designed for people who want to go out and cannot cycle independently.

- The Orthros complies with all laws and regulations applicable to use on public roads. Use of the Orthros as a racing or cross bike is outside normal use and Huka's responsibility.
- It is your responsibility to act in accordance with the specific safety requirements of the country you are cycling in. This includes any insurance according to the relevant legislation, including proper equipment of yourself and the bike required by the country concerned.
- The driver must be independently mobile and must not have any physical or mental problems that prevent safe participation in traffic, such as an (audio) visual impairment.
- The maximum user weight and luggage weight (found in the Technical Specifications section) must not be exceeded.
- The bike is designed for two people.

## **WARRANTY**

Huka gives a 5-year warranty on the frame of the Orthros. You also have a 2-year warranty on the battery and other parts. All warranties are carried out by your Huka dealer.

The guarantee does not apply to damage or defects to the Orthros caused by injudicious or improper use. Assessment of this lies with Huka B.V. or a representative appointed by Huka B.V..

- The warranty does not apply to parts subject to wear and tear, such as the chain, brakes and tires.
- Under no circumstances shall Huka be liable for special or consequential damages resulting from negligence on the part of the user of the Orthros. Even Huka has been informed of such damages.
- Applicable law may not permit the limitation or exclusion of liability or damages. Therefore, the above limitation or exclusion may not apply to you.
- The warranty and product liability in general may be invalidated if the instructions in this manual have not been followed. This occurs if unauthorized maintenance work, technical modifications or additions have been made to the bicycle with non-original Huka parts without Huka's consent. It also invalidates the CE marking. The absence of a CE declaration may lead to problems in insuring the bicycle and in the event of any damage or liability.



**TIP FROM KEVIN** Write down the frame and key number of your Orthros below. The number is important for guarantees, repairs or in case your pillion bike is stolen for reporting to your insurance. You can find the number on the frame tube under the right seat.

Frame number



Sample identification sticker


Key number



Huka BV  
Munsterstraat 13, 7575 ED Oldenzaal  
The Netherlands, Tel: +31 (0) 541 572472  
SRN: NL-MF-000003494

Type/Typ :

Max gewicht/Max weight KG :

 2023-07  
SN 2307184



Location identification sticker

## EU DECLARATION OF CONFORMITY

Manufacturer's name:	Huka B.V.
Address:	Münsterstraat 13, 7575 ED Oldenzaal
,	The Netherlands
SRN:	NL-MF-000003494
Product type:	Duo bicycle
Trade name:	Orthros
Basic - UDI:	8720589794016
Risk class:	Class 1

Huka applies the following procedures for the CE marking of their products according to Regulation MDR 2017/745: Class 1: according to (EU) 2017/745 Annex VIII. This declaration of conformity is provided under the exclusive responsibility of Huka. We hereby declare that medical device(s) specified above comply with the provision of Regulation (EU) MDR 2017/745 for medical devices. This declaration is supported by the certified quality system according to ISO 13485:2016 issued by the Quality Mark Institute and the relevant sections of the following harmonized standards: EN-ISO 14971: 2012 and EN 12182: 2012. All supporting documentation is kept at the manufacturer's premises. Signed on behalf of Huka,

**Signed on behalf of Huka on April 6, 2023 at Oldenzaal, The Netherlands**

A handwritten signature in black ink, appearing to read "R. Lotgerink", with a long horizontal stroke extending to the right.

R. Lotgerink,  
Managing Director



# First bike ride on the Orthros

The time has come. The first experience on your own Orthros! Whatever bike ride you want to make, safety comes first! Should you be cycling on a Huka bike for the first time, there are some points of interest. The most important tip we can give you is to relax as much as possible while cycling. To make everything as easy as possible, we'll give you some instructions.

**TIP FROM KEVIN** Make sure the handlebars and seats are adjusted properly before cycling. This way, you can have the right posture on the bike.

## SAFELY ON THE ROAD

Besides your agility on the Orthros, which gets better and better as you use it, it is important that the bike is in optimal condition when you hit the road. Keep the following points in mind:

- The driver must be at least 16 years old.
- Before each use, check the condition and operation of brakes, parking brake, tires, rims, spokes, lights, steering and check if the quick release lever of the front wheel hub is fastened well.
- Keep in mind that braking characteristics change and braking distance may increase with slippery road surfaces and/or heavier weight, among others.
- The turning circle of the Orthros is larger than that of a regular bike.
- Make sure luggage is secure and cannot slide and that any tires are not loose and can get into a wheel.
- Cycle on flat and paved surfaces and avoid deep potholes, high thresholds, sloping sides and puddles of water.
- Drive at appropriate speed on wet or slippery surfaces and slopes.
- Do not cycle against kerbs.

- Moderate your speed on descents so you can always stop in time and in a safe manner.
- Moderate your speed before taking a turn so that all wheels stay on the ground.
- Always lock your bike when you park it.
- Use the parking brake to prevent rolling away.
- We recommend wearing reflective clothing or a reflective jacket.
- The passenger must wear a seat belt if available.
- Wear an appropriate bicycle helmet.
- Orthros is largely made of steel, which is considered non-combustible. The other materials used such as plastic, rubber and the like are not fireproof.
- Do not put the bike in direct sunlight: the temperature of metal parts can exceed 40°C and potentially cause pain when touched.
- Extra caution is required during pregnancy due to increased risk of injury.

It is not recommended to cycle on a slope steeper than 10%, this entails an increased risk.

- It is recommended to drive slowly on slopes.
- If you are stopped on a slope, ride off slowly, leaning forward if necessary to prevent the front wheel from losing contact with the ground.
- Are you rolling backwards on a slope? Then brake densely to prevent the front wheel from losing contact with the road surface.



Never be tempted to drive too enthusiastically on the carriageway, such as going up and down pavements. Your Orthros could suffer (in)visible damage as a result, which could pose additional risks.

## BOARDING AND CYCLING

Always use the parking brake when mounting and dismounting. The parking brake prevents the bike from rolling away and can lead to dangerous situations.

- When you get on as a rider, you just sit on the seat and put your feet on the pedals. For the co-driver, it's the same, only you have the option of rotating the seat to make it easier to get on the bike.
- Once you are well seated and want to start cycling, take the bike off the handbrake.
- Put the gear in 1 so you can pedal lighter.
- Always stay upright and keep your feet on the pedals. Even when braking or standing still.

**TIP FROM KEVIN** When cycling, steer with your arms and not your body. Cycling through bends takes some getting used to. To stay stable, lean your body slightly to the inside of the corner during sharp turns. Be careful on short corners. Adjust your speed. Avoid sudden and violent steering movements. This will prevent accidents and damage.

**TIP FROM KEVIN** When you want to shift gears, stop pedaling first and then select the gear you want. Do not pedal while shifting gears. This may cause damage to the shifting mechanism. Damage to the gear hub due to abuse is not covered by the warranty.

## BRAKES

The Orthros comes with hydraulic disc brakes on the front and rear wheels. We will give some instructions on the different braking options.

- Left hand brake: To brake with the front wheel, squeeze the left brake lever.
- Right brake lever: To brake on the rear wheels, squeeze the right brake lever.
- The parking brake function is in the brake lever on the right.



Be careful using the front brake when cornering. Using only the front brake when cornering may cause instability of the pillion bike. This may result in personal and/or property damage.



Always use the parking brake when getting on or off the bike. This prevents the bike from rolling away and reduces the risk of falling.

## PARKING BRAKE

Squeeze the right brake lever and push the pin down to engage the parking brake. To release the parking brake, simply squeeze and release the brake lever.



Squeeze brake lever



Lock pin push down

Optionally, an additional parking brake lever is possible mounted on the handlebar stem.



Activated



Deactivated

You can activate this parking brake by pulling the lever all the way backward. This puts the brake on the front wheel so your bike is safely parked.

**KEVIN'S TIP** Always use the handbrake when mounting and dismounting. This prevents the bike from rolling away. You risk falling if the bike moves away from you.



Exposure to bright sunlight can make different materials very hot.



The product contains moving parts. Think of the chain, wheels, front fork, etc. Be alert to pinch hazards.

# Product description

The Orthros consists of several parts. We describe the most important parts in this section.

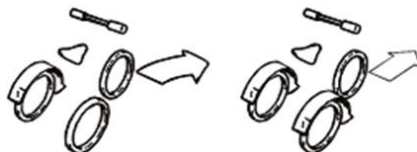
## BICYCLE FRAME

The frame of the Orthros consists of a tubular metal construction supplemented by aluminum and stainless steel parts. Most metal parts are phosphated and then given an impact-resistant powder coating. This construction and finish guarantees years of cycling pleasure.



When riding the Orthros alone without a passenger, be extra careful when taking a turn. Reduce your speed to avoid lifting a rear wheel off the ground and causing instability.

Thanks to the differential, both rear wheels are driven independently. This makes the bike go straight and turns easier.



Bicycle without differential

Huka bicycle with differential

## WHEELS AND TIRES

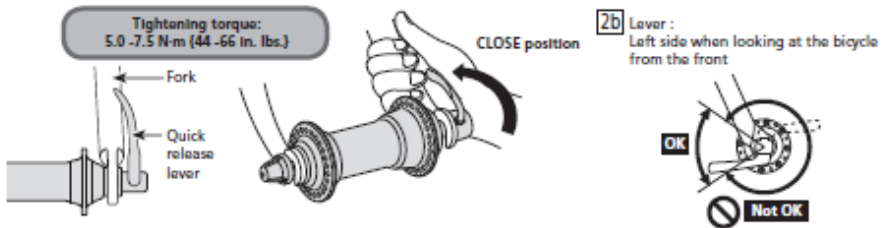
The wheels are made with quality hubs, stainless steel spokes and an aluminum rim. A-quality anti-puncture tires are mounted on these rims. These ensure good grip and low rolling resistance and less wear. The bike's wheels should only be replaced by a Huka dealer.

**TIP FROM KEVIN** Check tires regularly for wear and pressure. Tire pressure and tire wear have a major impact on the bike's handling.



The front wheel is mounted with a quick release hub in the front fork. This quick release lever must be tightened well to prevent the wheel is coming loose.

Mount the quick release lever like in picture below and close it by pushing with your thumbs or hand palm.



Always check the quick release lever of the front wheel is fixed well. Not fixed well front wheel hub can cause the wheel is coming loose which could pose additional risks.

## SPOKES

Proper tension of the spokes ensures a stable bike. Because new spoke wheels run in, your Orthros' spokes should be checked and tightened after 200 kilometers or 2 months. Your Huka dealer can take care of this. Should a spoke break or become loose, please consult your Huka dealer immediately.

## CHAIN GUARD & CHAIN

The chain guard is specially designed for bikes and made of an impact-resistant plastic. The chain guard protects the chain from dirt and water and also prevents the chain from dirtying your legs or clothes. With proper chain

tension, the Orthros pedals lightly and you hardly hear the chain. If you notice that a chain is too slack, have it adjusted by your Huka dealer.

## **BRAKES**

The Orthros is equipped with hydraulic disc brakes on the front wheel and on both rear wheels. The parking brake function is in the brake lever on the right. Optionally, you can opt for an additional parking brake lever on the handlebar stem.

**TIP FROM KEVIN** Brakes can wear out over time and are very important for safety while cycling. So have your brakes checked regularly and, if necessary, adjusted or brake pads replaced. A Huka dealer can support in this.



Always check the operation of the brakes before using your bike. Properly functioning brakes are very important for safe cycling.

## **BOTTOM BRACKET, CRANKSET AND PEDALS**

- The bottom brackets are maintenance-free and not adjustable. If there is play in the bearings, visit your Huka dealer immediately. If play occurs between the crank and the bottom bracket, remove the dust cap from the center of the crank and tighten the underlying bolt with a socket spanner 13.
- Most pedals are maintenance-free. Is there too much play? Consult your Huka dealer. When assembling the pedals yourself, note the indications L (left) and R (right) on the pedal axles. The left pedal you tighten to the left. The right pedal should be tightened clockwise. Use a socket spanner 15 or a special (narrow) pedal spanner.
- Different types of pedals are optionally available.

## GEARS

The Orthros comes with an 8-speed freewheel hub. Upon delivery, your Huka dealer will have checked the gearing and adjusted it correctly. The explanation of the gear hub can be found in the Shimano manual.



Adjusting the gear hub is specialist work. This should only be carried out by a Huka dealer.

## CHAIR

The seat shells are adjustable in height and depth. It is very important to adjust the seat properly to cycle efficiently, comfortably and safely. Different seat cushions are optional.



When adjusting the seat, make sure the knob of the sliding system is tight enough to prevent the seat from moving while cycling.

## HANDLEBAR

The Orthros' handlebars are made of steel or aluminum. This depends on the handlebar model. The handlebars can be adjusted in height and angle. With some models of handlebars, you can also adjust the angle and depth of the handlebars.



The seat and handlebars should always be securely fastened. Check this regularly. A loose seat or handlebar can cause an unsafe situation.



When setting the height, make sure that the stem sticks into the frame enough so that the safety marking "MIN" is not visible.



## MUDGUARDS

The mudguards are made of impact-resistant plastic and are fully colored. Splashing water is stopped by the mudguards and prevents dirty clothes.

## LIGHTING

The Orthros has e-bike lighting with low power consumption. You can switch the lights on and off by pressing and holding the + button on the display. Optionally, a color display is available in which the lighting switches on and off automatically via a twilight sensor.



Turn the lights on in time to avoid dangerous situations in traffic.

## LUGGAGE CARRIER

An optional basket on the back of the bike is available to carry luggage. Ask your Huka dealer so that the right materials are used and the basket is fitted safely.



Distribute the luggage on the carrier as well as possible. The maximum load is 20 kg. The total maximum load Orthros is 120 kg co-driver + 120 kg driver + 20 kg luggage = 260 kg.



Always make sure lights and reflectors are clearly visible. Luggage should also be properly secured. Luggage not properly secured can be dangerous in traffic. Straps should be properly fastened and checked to avoid getting caught in the wheel.

## ELECTRIC PEDAL ASSISTANCE

The Orthros is equipped with electric pedal assistance. The Orthros has a motor in the rear frame and a battery under the seat. On the handlebar is a display with controls.



Display



Motor in rear frame



Battery

The bike also comes with an electric pedal assistance manual for more information and explanations on the operation and features of the pedal assistance.

## PASS VARIO PEDAL ASSISTANCE

With the Pas Vario support, you pedal along and the pedaling is supported by the electric motor on the rear wheels. The degree of support can be set with the + / - buttons on the handlebars and can be read on the display. The bike is equipped with a 43V Li-ion battery mounted on the left under the seat. An additional battery is optionally available and is mounted under the right seat.

## PEDAL-ASSISTED BICYCLES

The electric motor is switched on as soon as you start pedaling when the system is switched on. Pedaling becomes lighter. When you stop pedaling, the pedal assistance also stops.

- Switch on pedal assistance by pressing and holding the 'On/Off button' for 3 seconds.
- Switch off pedal assistance by pressing and holding the 'On/Off button' for 3 seconds.
- You can set the support at different levels using the + / - buttons on the handlebars. Level 1 is low support and level 5 is high support.

## DISPLAY

The Orthros is equipped with a display that shows the status of the battery. The display also shows the speed, ride distance (Trip) and total distance (ODO). By briefly pressing the power button, you can scroll through the menu. With the plus and minus button you can select the assistance level. You have five factory-set support levels.



Standard display with controls



Colour display with controls

## FUNCTION WALKING SUPPORT

The walking aid function is designed to avoid heavy pushing when walking next to the bike. The walking aid is activated by pressing the minus button several times until a figure with a bicycle appears on the display. If you then hold down the minus button, the bike will automatically start moving up to 4 km/h.

## ACCESSORIES

The Orthros can be expanded with various accessories. Think armrest, foot fixation, mirrors, shopping basket and footplate. enquire about the accessories at the Huka dealer who supplied the Orthros.



Freewheel activated



Basket at rear



Footrest folding

### ASSEMBLING PARTS

It is important that all parts on the bike are tight. Different parts should be tightened with a torque. Use a torque spanner for this. The table below shows values for correct tightening torques. If in doubt, consult your Huka dealer for advice.

Section	Tightening torque
Seat with rotary knob or lever	Hand tight
Seat bolts	12Nm
Handlebar stem	23Nm
Rear wheel nuts	40Nm
Engine nuts	50Nm
Quick release hub for front wheel	10-15kg (close it by pushing with your thumbs)



Failure to properly tighten parts can lead to unsafe situations.  
Stick to the prescribed tightening torques



# Optimal use

Upon delivery of your new Huka, the components are properly adjusted to your body and tailored to your needs. To make sure you sit comfortably, there are adjustment options to flexibly adjust the seating system and handlebars.

## SEAT DEPTH ADJUSTMENT

To adjust the seat depth, the following actions apply:

1. Turn the lever anti-clockwise to unlock the seat.
2. Move the seat to the desired position by moving forwards or backwards. The seat then also changes in height to achieve the best sitting position.
3. Re-tighten the lever clockwise and, if desired, move the seat back and forth slightly to test whether the seat clamps properly on the carriage.



**TIP FROM KEVIN** A good rule for adjusting the seating: sit on the bike with the crank in line with the carriage of the seat. With your heel on the pedal, you should just be able to extend your leg.



Saddles and handlebars should be securely fastened. A loose saddle or handlebar increases the risk of dangerous situations in traffic.

Good posture also depends on the right handlebar height that can be adjusted.

- The handles should generally be at rider waist level.
- The handlebars should not touch the knees while cycling, including when cornering.

## ADJUSTING HANDLEBAR HEIGHT

1. Use a size 6 Allen key to loosen the bolt in the middle of the stem up to three turns. Do not loosen the bolt too far as the expander will loosen and fall into the bottom of the steerer tube.
2. Slide the handlebar into the desired position. Make sure the safety mark on the handlebar stem is not visible above the frame.
3. Tighten the bolt again to 23 Nm.



Safety marking  
on handlebar stem



When adjusting the handlebar height, make sure the stem is deep enough in the frame so that the safety mark is not visible.

**TIP FROM KEVIN** Sometimes the stem is very tight and cannot be moved even if the stem bolt is loosened. Take a plastic hammer and hit the stem bolt once. It will shoot down slightly, after which the stem will be loose.

## ADJUST STEERING ANGLE

1. Use a size 6 Allen spanner to loosen the bolt at the front of the stem three turns.
2. Slide the handlebar to the desired angle. Make sure the handlebar stays center in the clamp of the stem.
3. Tighten the bolt again to 23 Nm.



## HANDLEBAR STEM WITH QUICK-RELEASE DEVICE

1. Slide the locking tab upwards
2. Pull up the lever
3. Place handlebars in desired position
4. Push the lever closed again until the locking tab clicks into place



Instellen switch stuurpen



The lever should close with a resistance of 120-150N.

Otherwise, the handlebar may come loose during cycling, which could lead to serious injuries.

# Maintenance Orthros

Optimal riding comfort is created by keeping the bike in good condition. In this chapter we will show you how to do this. We also advise you to have annual maintenance carried out by your Huka dealer. They will check the Orthros for functionality, safety and possible wear.



After 200 kilometers or after 2 months, you should have the first service carried out by your Huka dealer. They will check screw connections, chain and spoke tension, etc. Failure to have maintenance done by a Huka dealer may affect your warranty.

## CLEANING

Clean the bike regularly. This can be done with warm soapy water combined with a mild detergent. The rims can be cleaned with warm water and a soft brush. Do not use a wire brush. This will damage the rims. The use of a high-pressure cleaner is not recommended. The high pressure will blow the grease out of the bearings, among other things. Rinsing with a garden hose is fine, as long as the spray is not too powerful.

## TIRE PRESSURE AND TREAD

Check tire pressure and tread regularly for optimum grip on the road. This prevents unnecessary tire wear. Moreover, it makes cycling more pleasant and has a positive influence on braking and steering movements. The Orthros has tires with a bicycle valve. The right tire pressure is between 3 and 5 bar. After inflating, check that the valve does not leak. To do this, smear some saliva over the valve tube. If an air bubble appears, the valve should be replaced. If the tread is less than 1 mm deep, the tire should be replaced. Your Huka dealer can support you in this.

## FIXING A FLAT TIRE

Got a flat tire on the Orthros? Your Huka dealer can fix the tire, of course. But should you want to do it yourself, here are the instructions.

Needed: a repair kit (with tire levers, glue, stickers and sandpaper, stand or jack, scissors, bicycle pump and a bucket of water).

- Deflate the tire and unscrew the valve.
- Place the first tire lever next to the valve (between the outer tire and the rim) and hook it behind a spoke. Do the same with the second tire lever (about two spokes away). Carefully lever the tire loose with the third tire lever.
- Remove the outer tire from the rim and remove the inner tube. Check the tire and rim for anything sharp (glass, nails, etc.) on the inside of the outer tire.
- Inflate the tire and find the leak by holding the tire under water. Where air bubbles appear, it is the puncture.
- Drain the tire and lightly sand the puncture site. Spread some solvent on the tire and let it dry for two minutes.
- Use a ready-made sticker or cut a round from the piece of tire sticker. Stick it on the puncture and press firmly. Let it dry for 5 minutes.
- Place the outer tire halfway back on the rim and fit the valve through the valve hole. (Wait to tighten the thin nut until the tire is back on the rim).
- Inflate the inner tube a little and place it in the outer tire. Press the outer tire into the rim all around. Start at the valve and go around slowly.
- Press the valve slightly inwards so that the outer tire sits snugly in the rim.
- Inflate the tire to the correct pressure. Check that the outer tire sits nicely on the rim. Tighten the small nut on the valve. The tire is repaired.

**TIP FROM KEVIN** A malfunction contact your Huka dealer immediately. Do not use the bike until the fault is fixed This will shoot down slightly, after which the handlebar stem will be loose.

## WHEELS

The wheels ensure light running and high riding comfort. Properly inflated tires and tightly tensioned spokes are important for optimal cycling comfort.

**TIP FROM KEVIN** Before cycling, check that the wheels turn smoothly and do not creak. Creaking noises usually indicate a loose spoke or a defective bearing. In this case, contact your Huka ..dealer



Always check the quick release lever of the front wheel is fixed well. Not fixed well front wheel hub can cause the wheel is coming loose which could pose additional risks.

## SPOKES

Spokes should be checked for tension once a month. A loose spoke usually causes creaking noises. A loose spoke can cause the rim to warp, affecting riding. The spoke check is easy to perform by stroking your finger along the spokes like on a guitar. A spoke with an abnormal tone is probably loose. The

Huka dealer can then make the repair.

## CHAIN

The chain should be cleaned and lubricated regularly. In addition, the chain tension should also be checked regularly. We recommend having this work done by a Huka dealer.

## BRAKES

Test the operation of the brakes regularly. A brake that is too slack will not brake adequately. The brake can easily be adjusted slightly tighter with the adjustment bolt on the inside of the brake lever.



Are the brakes not adjustable or does the Orthros still not brake properly? Then have it checked and adjusted by your Huka dealer.

## BATTERY CHARGING

Before cycling, check that the battery is still sufficiently charged. Depending on the capacity, charging takes between 3 and 8 hours. Always use the original battery charger.

**KEVIN TIP** Low ambient temperature has a detrimental effect on battery charging. In temperatures below 10 degrees, take the battery indoors and charge it at room temperature.

### **Tips for safe charging:**

- Only use the original charger
- Hang a smoke detector in the room where you charge your battery. Something can always go wrong unexpectedly when charging.
- Preferably charge your battery during the day so you can take quick action when needed.
- Do not expose your battery to freezing temperatures, full sun or moisture; instead, charge and store your battery at room temperature. This will prevent overheating and damage.
- Place your battery in a stable, free and non-flammable place during charging.
- Do not charge a battery if it feels hot to the touch. If the battery becomes very hot during charging, stop charging and take the battery to a safe place, preferably outside.

### **Tips for prolonging life:**

- Do you use your battery infrequently? Charge your battery at least every three months. A battery drains slowly, which can damage it if the voltage is too low.
- Use only the supplied/recommended charger. Imitation chargers can damage your battery, even if they sometimes have the same specifications.
- Remove your battery from the charger when it is 100% charged. This will prolong the life of the battery.



Batteries and battery chargers with mechanical damage caused, for example, by falling or bumping, damage from heating or water pose a high fire risk. Do not charge them or try to repair them. Then put it outside and inform your dealer/bicycle shop.



## REPLACEMENT OF PARTS

Is your Orthros broken or do you need parts replaced? We advise you to have this done by your Huka dealer. This is one way to avoid voiding the manufacturer's warranty. To replace the inner tube and/or tire, use the following sizes:

### Orthros

- Inner tube and rear wheel tire: 55-406
- Inner tube and tire front wheel: 55-507



Always have original Huka parts fitted to the bike.  
The Huka dealer can order and fit these directly.

**TIP FROM KEVIN** Do you have questions about the maintenance of your Orthros? Your Huka dealer will be happy to support you. We also give you tips on maintaining your pillion bike in this manual.

## LIGHTING

The Orthros has e-bike-powered, low-power lighting. You can turn the lights on and off by pressing and holding the + button on the display for three seconds.

The lights are powered by the electrical system battery and do not need to be replaced. If the front or rear lights do not work, check that the cables are connected properly. If this is correct and the lights do not work, contact the dealer to have it repaired.



Front light



Rear light

To adjust the headlight, open the hex bolt (see picture red arrow) two turns and adjust the light to the correct position. Tighten the hex screw again and check that the light is not adjusted too high or too low.

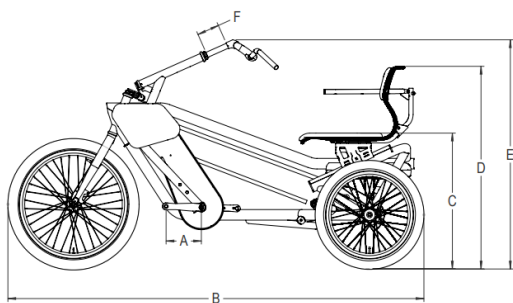
## MOVING THE BIKE

To move or carry the bike, it is best to grip it at the back by the rear frame and at the front by the head tubes. We recommend lifting the bike with at least four people. It is not possible to lift the bike alone because of its weight. Only lift by the fixed parts and not by accessories.

# Specifications

	Standard version
Frame material	Steel
Coating	Epoxy coating outdoor quality
Wheels	Aluminum rim, hub and stainless steel spokes
Lighting	LED headlights and rear lights
Bell	Sporty and modern bell
Mudguards	Impact-resistant plastics
Chain case	Impact-resistant plastic housing
Send	Aluminium
Tribe	Steel
Seats	Plastic seat shells
Brakes	Hydraulic disc brakes and parking brake
Drive	Central axle gear and differential in rear axle
Options	See order form
Warranty	2 years, parts that wear out are not included
Technical life time	7 years
Frame material	Steel
Coating	Epoxy coating outdoor quality
Wheels	Aluminum rim, hub and stainless steel spokes
Lighting	LED headlights and rear lights

Standard version	
Length excl. basket(W)	2050 mm
Height (e)	1300 mm
Width incl. armrests	1200 mm
Rear wheel width	1000 mm
Weight	78 kg
Length of crank (A)	170 mm
Inseam	600-900 mm
Saddle-floor height (C)	570-680 mm
Backrest height (D)	890-1000 mm
Handlebar setting (F)	150 mm
Handlebar width copilot	500 mm
Maximum load/chair	120 kg
Maximum total load	260 kg
Wheel size front	24"(55-507)
Rear wheel size	20"(55-406)



## Other information

### CONTACT DETAILS HUKA

Do you have questions about our product development? Or do you have suggestions to improve our Huka bikes? If so, please contact us.

Munsterstraat 13  
7575 ED Oldenzaal  
+31 (0)541-572472  
[info@huka.nl](mailto:info@huka.nl)  
**[www.huka.nl](http://www.huka.nl)**

For questions about servicing your Orthros, we refer you to your Huka dealer.

### CHANGES

Huka has a philosophy of continuous product development and improvement. As a result, the product supplied may differ from the images shown. Huka BV reserves the right to make changes to the product as described in these instructions for use. No liability is owed for this. Misprints reserved. For the most up-to-date version of the manual, please visit [www.huka.nl](http://www.huka.nl)

For the most up-to-date version of the manual, visit [www.huka.nl](http://www.huka.nl)

## **SALE OF THE ORTHROS**

If you want to sell your Orthros to another user, it is important to hand over all the necessary technical documentation so that the new owner can use the bike safely.

Have the bike inspected by your Huka dealer before sale to make sure the Orthros is sold in good condition. Want to buy a used Huka bike? Then we recommend having it inspected by your Huka dealer beforehand. They can quickly see if the bike is subject to wear and tear or has hidden defects.

## PRODUCT DISPOSAL

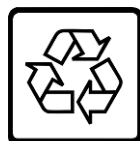
Are you no longer using the Orthros? Then contact your Huka dealer. They can guide you in a possible sale or trade-in. If you want to dispose of your Orthros, you can also contact your local waste disposal company. They will dispose of the bike according to the rules and laws that apply in your hometown.



If you want to replace batteries or accumulators on your bike, keep in mind that they are chemical waste. Ensure proper disposal of the battery by handing it in at an official battery recycling collection point

## RECYCLING THE BATTERY

If the battery is defective or if you no longer use it, you must have it recycled. You can do this at a WEEE collection point. These are non-profit organizations regulate everything concerning the recycling of batteries for your country.



**Li-ion**

# Huka makes your world easier

To best meet the needs of individual riders, we believe good service is essential! Huka is known for its good service and far-reaching commitment. Do you own a Huka bicycle and would like to have periodic maintenance done? Our dealers are happy to carry out all maintenance work for you!

Your Huka dealer