



MANUAL

# Duo bike Orthros



EXTEND YOUR  
STANDARD WARRANTY  
TO 10 YEARS  
VIA [WWW.HUKA.NL/  
EN/WARRANTY](http://WWW.HUKA.NL/EN/WARRANTY)





# Congratulations on your new Orthros

Would you like to cycle carefree? With your Orthros we want to make your world easier. You would probably rather go cycling than read the manual. That is why we have put together a manual that contains the most important and necessary information about the safe use of the Orthros. Please read this manual thoroughly before using the Orthros and always follow the instructions given in the manual. To make the best use of your tandem, I will sometimes give you a few advices so that you can continue to cycle safely and have fun.

We are curious about your experiences and where you like to ride. Would you like to share it with us on Facebook? We love to hear from you!

**We wish you lots of cycling fun!**

Kind regards,

Kevin Verduijn

Maker of the Orthros



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# General

## Indication & application

The Orthros is specially designed for people who need extra support in order to enjoy stable and safe cycling. This may be because you would like to experience more stability or, for example, because of a neuromuscular disorder that can affect your coordination or natural movement possibilities. The duo bike is also used for people who want to cycle together! The Orthros is designed to be used on normal public roads and cycle paths.

- The Orthros complies with all laws and regulations applicable to the use of public roads. The use of the Orthros as a racing or cross bike falls outside the intended area and responsibility of Huka.
- It is your responsibility to act according to the specific safety requirements of the country you are cycling in. This also applies to possible insurances according to the relevant legislation including a correct outfitting of yourself and your duobike that the country in question requires.
- The driver must be independently mobile and may not have any physical or mental challenges that make safe participation in traffic impossible, such as an (audio) visual impairment.

## Warranty

Huka offers a standard 5-year guarantee on the frame and front fork of your Orthros. You also have a 2-year guarantee on the battery and other parts. All warranties are handled by your Huka dealer.

- The guarantee does not apply to damage or defects to the Orthros that have been caused by wrong or injudicious use. The assessment of this lies with Huka B.V. or a representative to be appointed by Huka B.V.
- The guarantee does not apply to parts subject to wear and tear, such as the chain, brakes and tyres.
- Under no circumstances shall Huka be liable for any special or consequential damages due to the negligence of the user of the Orthros. Even if Huka has been informed about such damages.

- Applicable law may not allow 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 expire if instructions in this manual have not been followed. This is the case when maintenance work, technical changes, or additions to the bicycle have been carried out with non-original Huka parts without Huka's permission. It also means that the CE-marking has expired. The lack of a CE-declaration can lead to problems with the insurance of the bicycle and with possible damage or liability.

**ADVICE FROM KEVIN** Please write down the frame and key number of your Orthros. The number is important for guarantees, repairs or in case your bike is stolen to report to your insurance company. You can find the number on the frame tube under the right seat.

Frame number

Sleeve number



Location identification sticker

	Type/Typ :	
	Max gewicht/Max weight KG :	
		2013-12
Huka BV	SN :	1312000
Postbus 194, 7570 AD Oldenzaal		
The Netherlands . Tel: +31 (0) 541 572472		
Goedgekeurd volgens/Approved to: EN 12182		

Example identification sticker

## EU Declaration of Conformity

Supplied under the sole responsibility of the manufacturer:

Huka B.V.

Munsterstraat 13, 7575 ED Oldenzaal, Netherlands

Hereby declares that the following device:

Registered trade name:	Orthros
Product type:	Duobike
Risk class:	Class 1
SRN:	NL-MF-000003494

*To which this declaration relates, is in conformity with the following Regulations:*

Regulations (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 (MDR).

And with the CE mark which can be identified from the:

labels on the tricycle's main frame and illustrated in the Warranty section of this manual.

Signed on behalf of Huka,

A handwritten signature in black ink, appearing to read 'R. Lotgerink', followed by a horizontal line.

R. Lotgerink,  
Managing Director

Datum: 15 april 2021







# First bike ride on Orthros

The time has come. Your first experience on your own Orthros! Whatever bike ride you do, your safety comes first! If it is your first time cycling on a Huka companion cycle, you may have to get used to it. The most important tip we can give you is that you should relax as much as possible while cycling. To make sure everything goes as smoothly as possible, we give you a number of instructions.

**ADVICE FROM KEVIN** Make sure that the handlebars and seats are properly adjusted before you start cycling. This way, you can assume the correct position on the bike.

## Safe on the road

Apart from your dexterity on the Orthros, which will improve as you use it, it is important that the duobike is in optimum condition when you go out on the road. We recommend that you take the following aspects into account:

- Before each use, check the condition and operation of the brakes, tires, rims and steering system.
- Keep in mind that the braking characteristics change and the braking distance may increase when the road surface is slippery.
- Make sure that possible luggage is securely fastened and cannot shift.
- Ride on flat and firm surfaces and avoid deep potholes, high thresholds and puddles of water and slopes with more than an 8% incline.
- Ride at appropriate speeds on wet or slippery surfaces, slopes or chasms. Do not bump into curbs.
- Always lock the duobike when parking it. Use the parking brake to prevent possible runaway.
- The Orthros is largely made of steel which is considered non-flammable. The other materials used such as plastic, rubber and parts like these are not fireproof.
- When pulling away on a steep slope, lean forward if necessary to prevent the front wheel from lifting or skidding. When reversing on a slope, brake carefully until you come to a stop.

- Descend a slope at a moderate speed so that you can always come to a stop in time and in a safe manner.
- Do not exceed the maximum weight as stated in chapter Specifications' section.
- Wear an appropriate bicycle helmet.
- Wear reflective clothing to increase visibility on the road.
- When the Orthros is used by children or young people, we recommend never letting small children ride alone in public traffic.
- Before setting off, check that the lights are working and replace the batteries on time.

## Boarding and cycling

Always use the parking brake when getting on or off the bike, so that the bike will not move. The passenger seat can be turned outwards to make it easier to get on. Put it in first gear (if necessary), so you can pedal more lightly. As soon as you sit down and want to cycle, take the duobike off the parking brake.

- When standing up, lift both feet and place them side by side in front of the chair. Then sit down slowly.
- Stay upright at all times and keep your feet on the pedals. Even when you brake or stand still.

**ADVICE FROM KEVIN** When cycling, steer with your arms and not with your body. Cycling into corners takes some getting used to. In order to maintain stability, lean your body slightly towards the inside of the bend. Adjust your speed accordingly. Avoid sudden and violent steering movements. In this way, you can avoid accidents and damage.

**ADVICE FROM KEVIN** When changing gears, make sure you stop pedalling and choose the desired gear. Do not continue pedalling when changing gears. This can cause damage to the gearshift mechanism. Damage to the gear hub as a result of abuse is not covered by the warranty.

## Brakes

The brakes of the duobike are operated by the main driver. The co-driver has no brakes. Depending on the chosen brake system, we give some instructions on the different brake possibilities.

- Back pedal brake: By stopping pedalling forwards and then pedalling backwards, the back pedal brake is activated. It works via the layshaft on both rear wheels. This function is optional on the duobike.
- Handlebar brakes: braking is done by squeezing both brake levers on the handlebars. The left hand brake operates the front wheel brake. The right hand brake operates the brakes of both rear wheels. When cornering, it is best to use the hand brake. Practise braking in a large enclosed area before you hit the road.



Be careful with the front brake when cornering. Using only the front brake in a bend can cause instability of the duobike. This can lead to personal and/or material damage.



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

## Pedal assisted bicycles

If your Orthros is equipped with pedal assistance, the electric motor is activated as soon as you start pedalling. Pedalling then becomes lighter. If you stop pedalling, the pedalling assistance stops as well.

- The support can be set at different levels using the arrow keys on the handlebar.
- To activate the pedal assistance, press the 'Mode' button for 3 seconds.
- To switch off the pedal assistance, press and hold 'Mode' for 3 seconds.

A detailed explanation of the pedal assistance can be found in the Heinzmann manual provided.

## With pedal assistance and drive help

The start-up aid is intended to make it easier to get going from a standstill. By pressing and holding the up arrow button, the drive assist is switched on and the motor will drive up to 6 km/h without you having to join it. When you release the arrow button, the drive-assist will stop immediately.



Control buttons

## Battery indication

If your Orthros is equipped with pedal assistance, the display will indicate how full the battery is. Check whether the battery is full when you (longer) distances. The black block gets shorter as the battery gets emptier. When the block is completely black, the battery is full. There is also a battery indicator on the battery itself.



Battery display



Exposure to bright sunlight can make various materials very hot.



The product contains moving parts. These include the steering wheel, wheels, etc. Be alert to the danger of crushing.

## Moving and carrying the duobike

To move or carry the duobike, grab the rear frame tubes and the front head tubes. We recommend that a minimum of three people should lift the duobike. Hold the handlebars tight while lifting to prevent the front wheel and handlebars from turning and possibly causing injury.





## Product description

Your Orthros consists of several parts. The most important parts are described in this chapter.

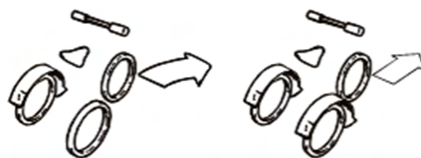
### Bicycle frame

The Orthros frame consists of a tubular metal construction complemented by aluminium and stainless steel components. Most of the metal parts have been phosphated and then given an impact-resistant powder coating. This construction and finish guarantee years of cycling pleasure.

### Drive

The duobike has its own specially designed drive system on the rear wheels. This drive (by means of a differential) ensures that the duobike does not tilt and that bends can be taken easily.

Due to the differential both rear wheels are driven independently from each other. This makes the bike go straight ahead and turns are easier to take.



bicycle without  
differential

Huka bike with  
differential

### Wheels and tyres

The wheels are equipped with quality hubs, stainless steel spokes and an aluminium rim. A-quality anti-puncture tyres are mounted on these rims. These provide good grip, low rolling resistance and less wear.

**ADVICE FROM KEVIN** Regularly check tyre pressure and tyre wear to ensure safe cycling. Tyre pressure and tyre wear has a major influence on how your bicycle behaves.

## Spokes

A correct tension of the spokes ensures a stable duobike. Because of the functioning of the new spokes, the wheels of your Orthros should be checked after 200 kilometres or 2 months. Your Huka dealer can take care of this. Should a spoke break or become loose, please also consult your Huka dealer.

## Chain case & chain

The chain guard is specially designed for the Orthros and is made of impact-resistant plastic. This chain guard protects the chain from dirt and water and also ensures that the chain cannot dirty your legs or clothing. With a good chain tension, your Orthros will pedal lightly and you won't hear the chain. If you notice that the chain is too slack, have it adjusted by your Huka dealer.

## Brakes

The basic model of the Orthros has V-brake in the front wheel and disc brakes on the rear wheels. These brakes are operated by the driver of the bike by means of brake levers on the handlebars. An extra back-pedal brake that operates the rear wheels is optional.

**ADVICE FROM KEVIN** In time, brakes can wear out and are very important for safety while cycling. That is why you should have your brakes checked regularly and, if necessary, adjusted or replaced. Your Huka dealer can help you with this.



Always ensure that the parking brake is activated when getting on or off the bike. This prevents the bike from rolling away.

## Crankshaft, crankset and pedals

- The bottom bracket bearings that Huka uses are completely maintenance free and cannot be adjusted. If the bearing does get loose, go to your Huka dealer immediately. If there is play between the crank and the bottom bracket, take off the dust cap and tighten the underlying bolt with a socket spanner.
- Most pedals are maintenance-free. Is there too much play? Then consult your Huka dealer. When assembling the pedals yourself, pay attention to the indications L (left) and R (right) on the pedal axles. You turn the left pedal counter-clockwise. You tighten the right pedal clockwise. To do this, use a socket spanner or a special (narrow) pedal spanner.
- Various (modified) pedals are available as an option.

## Gears

Your Orthros is equipped with gears, whereby the gear hub is located between the pedals and the drive shaft. This is an 8-speed Nexus hub from Shimano, which has been tuned to the Orthros. The duobike can also be delivered in combination with an automatic reverse gear (reverse cycling is also possible). Upon delivery your Huka dealer has checked and adjusted the gears. The explanation of the gear hub can be found in the Shimano manual.



Adjusting the gear hub is very specialistic work. This should only be done by a Huka dealer.

## Seat

In order to cycle comfortably, safely and efficiently, it is important to adjust the seat correctly. The seats are adjustable from front to back. The passenger seat can rotate as standard for easy entry.



The seats must always be securely fastened in the lock. Check this regularly. A loose seat can create unsafe situations.

## Steering

The handlebars of the duobike can be made of steel or aluminium. This depends on the model of the handlebar chosen. The handlebars can be adjusted in height,

angle and depth. The main driver can steer the bicycle. The handlebars of the co-driver are fixed.



The handlebars must always be tightened securely. Check this regularly. A loose steering wheel can cause unsafe situations.



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



## Multi-adjustable handlebar (option)

A good posture also depends on the correct handlebar height. The handlebar height, handlebar angle and angle setting of the stem and handlebar can be adjusted for this. Use an Allen key to loosen the bolts slightly and move the handlebars to the desired position. Tighten the socket screws to the torque indicated on the handlebar.

## Lightning

The Orthros is equipped with battery-operated LED lights with low energy consumption and long life. These are available from various shops.



Remember to replace the batteries in good time to avoid dangerous situations in traffic. Without batteries, the lights will not work. Make sure that old batteries are disposed of properly.

## Luggage basket

As an option a luggage basket can be mounted on the back. Ask your Huka dealer about this, so that the right materials can be used and the whole thing can be assembled safely.



If you use the luggage basket, distribute the luggage as well as possible. The maximum load for this is 10 kg. Total maximum load Orthros : 120 kg driver + 120 kg passenger + 10 kg luggage = 250 kg.



Always ensure that the lights and reflectors are clearly visible. The luggage must also be properly secured. Luggage that is not properly secured can be dangerous in participating traffic. Straps or belts should be properly secured to prevent them from getting into the wheel.



If the pannier basket is loaded, this may affect the driving and braking characteristics of the duobike. Modifications to the pannier basket affect its safety and are not allowed. For example, the basket is not suitable for attaching a trailer or a bicycle seat.

## Electric pedal assistance

The Orthros can be equipped with electrical pedal assistance. This means that the double bike has an electric motor in the front wheel, a battery pack and an electronic box on the middle frame tube. A clear display with controls is also mounted on the handlebar.

## Pass Vario pedal assistance

With the Pas Vario support, you pedal along and the pedalling is supported by the electric motor in the front wheel. The degree of support can be adjusted with the control buttons on the handlebars and read on the display. The tandem bike is equipped with a 36V 11Ah Li-ion battery mounted at the back between the driver and passenger seat.



Handlebar controls  
on trolley



Battery display



Engine in the  
front wheel



Battery pack



## Accessoires

Your Orthros can be expanded with various accessories. Think of armrests, luggage basket, foot box, cane holders etc. More about these options can be found on the price list on our website [www.huka.nl/en](http://www.huka.nl/en) or contact your Huka dealer.



Switchable freewheel handle



Shopping basket



Footrest for co-driver

## Securing components

It is important that crucial components of the pushchair are properly secured. These components need to be tightened with the correct torque. The table below shows the values for these tightening torques.

Section	Tightening torque (nm)
Adjustable steering wheel bolts	as indicated on adjustable handlebars
Central stem bolt	20
Bolt seating system	20
Rear wheel nuts	30
Wheel nuts for	30



Failure to properly tighten components can lead to unsafe situations. Observe the prescribed tightening torques.

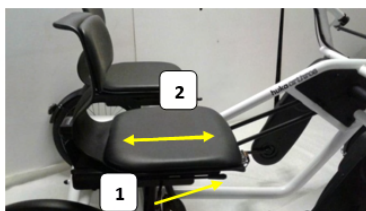
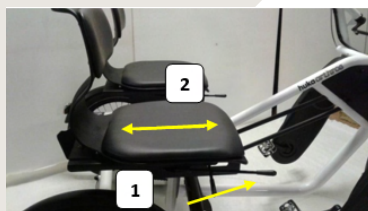
## Optimal use

When you receive your new Huka, the parts have been adjusted to your body and to your wishes. To make sure you are comfortable, there are adjustment possibilities for the seat system and handlebars.

### Adjust the seat depth

To adjust the seat depth, the following actions apply:

1. Pull the lever to the right to release the seat.
2. Adjust the seat to the desired position by moving forwards or backwards.
3. Release the lever and, if necessary, move the seat slightly back and forth so that the lock is audibly and noticeably engaged.

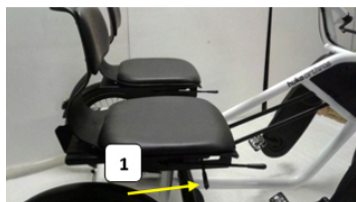


**ADVICE FROM KEVIN** A good rule of thumb for the adjustment of the seating system is to sit without shoes on the duobike with the crank facing away from you. With your heel on the pedal, you should barely be able to extend your leg. From this position, you can adjust the seat to the position you find most comfortable.

### Turn the seat

The co-driver's seat can be turned as standard. This makes it easier to get in and out. The following actions apply here:

1. Put the seat in the front position. See seat depth.
2. Push the lever (1) on the side of the seat forwards.
3. Turn the seat outwards (2) by  $\frac{1}{4}$  rotation.
4. Turn the seat back, release the lever and, if necessary, move the seat slightly back and forth so that the lock is audibly and noticeably engaged.



The seating system and handlebars must be firmly secured. A loose seating system or handlebar increases the risks of dangerous situations in traffic.

A good posture also depends on the correct handlebar height. The handlebar height, handlebar angle and angle setting of the stem and handlebar can therefore be adjusted.

## Adjust the steering angle

1. Using a size 6 Allen wrench, loosen the handlebar bolt slightly to allow the handlebar to rotate.
2. Rotate the handlebar to the desired position. Make sure that the stem retains enough of its position in the frame so that the MIN" safety marking is not visible.
3. Tighten the handlebar bolt securely again according to the Tighten the handlebar bolt again properly according to the described tightening torque on page 17.



## Adjust steering height

1. Using a size 5 Allen wrench, loosen the stem bolt slightly by a few turns then give a little tick on the allen wrench to allow the handlebar to slide.
2. Pull or push the handlebar to the desired height.
3. Tighten the stem bolt securely again according to the described tightening torque on page 19.



Make sure the handlebar stem sticks into the frame enough so that the safety marking is not visible.

## Adjust steering stem angle

1. Using a size 5 Allen wrench, loosen the angle adjustment bolts slightly (see figures 1 and 2 below) so that the handlebar can be moved.
2. Rotate the handlebars to the desired angle.
3. Tightening the bolts again secures the angle.
4. To adjust the handlebar to the desired angle, tighten the adjustment bolt according to figure three. Re-tighten the angle adjustment bolt securely according to the described tightening torque on page 19.



Adjusting height



Adjusting angle setting

**ADVICE FROM KEVIN** Sometimes the stem is very tight and cannot be moved even when the stem bolt is unscrewed. Take a plastic hammer and hit the stem bolt once. This will shoot down slightly, after which the handlebar will be loose.

## Wheels

The wheels are responsible for the smooth running and high ride comfort. Properly inflated tyres, tightly tensioned spokes and a little slack are essential for optimal cycling comfort.

**ADVICE FROM KEVIN** Before you start cycling, check that the wheels rotate smoothly and do not creak when you ride. Squeaking noises often indicate a loose spoke or a defective bearing. Contact your Huka dealer if this is the case.

We guarantee stability of the duobike at the following gradients:

- Slope up 10°. This corresponds to an incline of 17.5%,
- Downward slope 10°. This corresponds to a gradient of 17,5%,
- Side slope 10°. This corresponds to an incline of 17,5%,

## Tyre pressure

Always inflate the tyres properly. This prevents wear and tear on the tyres of your Orthros. It is also a more pleasant ride and you can react better to braking and steering movements. The correct tyre pressure is reached when you can press the tyre with your thumb. More information on tyre pressure can be found on page 24.





## Best maintenance Orthros

Optimal cycling comfort is created by proper maintenance of the duobike. In this chapter we will show you how to do this. We also advise you to have your annual maintenance carried out by your Huka dealer. They will check the Orthros for functionality, safety and possible wear and tear.



After about 200 kilometres or after 2 months you need to have your Huka dealer do the first service. They will inspect the nuts, chain- and spoke tension, etc. If you have the maintenance done by a non-Huka dealer, this can influence the warranty.

### Cleaning

Clean the duobike regularly. This can be done with lukewarm soapy water in combination with a mild cleaning agent. Clean the rims with lukewarm water and/or a soft brush. Do not use a steel 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 jet is not too powerful. Dry the bike with a cloth.

### Tyre pressure & tread

Regularly check the tyre pressure and tyre profile for optimum grip on the road. The Orthros can be inflated with a normal bicycle pump. The recommended tyre pressure is 4 bar. After inflating check that the valve does not leak. To do this, smear some saliva over the valve tube. If a bubble appears, the valve is leaking and must be replaced. If the profile is less than 1 mm deep, the tyres need to be replaced. Your Huka dealer can help you with this.

**ADVICE FROM KEVIN** Contact your Huka dealer immediately in the event of a defect. Do not use the bicycle or use it as little as possible until the malfunction has been solved.

## Bonding

Have you discovered that one of your Orthros' tyres has a flat tyre? Your Huka dealer can of course fix it. But if you want to do it yourself, here are the instructions:

You will need: a repair kit (with tyre levers, glue, stickers and sandpaper), a jack, scissors, a bicycle pump and a bucket of water.

- Deflate the tire and unscrew the valve.
- Insert 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). With the third tire lever, carefully rock the tire off the rim.
- Remove the tire from the rim. Check that there is nothing sharp (glass, nail, etc.) on the inside of the tire.
- Remove the inner tube from the wheel.
- Inflate the tire and find the leak by holding the tire under water. Wherever air bubbles appear, the leak is located.
- Deflate the tire and lightly sand the spot of the leak. Spread some glue on the tire and let it soak in for two minutes.
- Use a ready-made adhesive or cut a circle out of the piece of adhesive. Stick this on the puncture and press firmly. Let it dry for 5 minutes.
- Place the valve back in the rim and assemble. Wait to tighten the thin nut until the entire tire is back on the bike.
- Inflate the inner tube slightly and place it in the outer tire. Press the outer tire into the rim all around. Start at the valve and work your way around slowly.
- Pump the tire to the correct pressure. Check that the tire is properly seated on the rim. Tighten the small nut on the valve. The tire is fixed!

## Spokes

The spokes should be checked for tension once a month. A loose spoke usually gives creaking noises. A loose spoke can cause the rim to warp, which affects your cycling. A spoke check is easily performed by strumming your finger along the spokes like a guitar. A spoke with a different tone is likely to be loose. Your Huka dealer can do the repair for you.

## Chain

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

## Brakes

Regularly test the functionality of the brakes. A slackly adjusted brake does not brake sufficiently. The brakes can easily be adjusted a bit tighter with the adjusting nut at the brake handle.

To tighten the brake cable at the front, you can turn the adjusting nut on the brake handle outwards. Then you can fix this position by turning the locknut against the adjusting nut again and tighten it. The rear brake is a hydraulic closed brake system, that does not require adjustment. With this system, check the thickness of the brake pads if the braking action is not good or if you hear an abnormal noise during braking.



Can't you adjust the brakes or does the Orthros still not brake well?  
Then have it checked and adjusted by your Huka dealer.

## Lightning

The Orthros is equipped with battery-operated LED lighting with low energy consumption and a long service life. In time, the batteries need to be replaced. The batteries (type AA) are available from various shops.

The headlight batteries are replaced by unscrewing the screw at the bottom with a coin or screwdriver. Then follow the steps below. Then replace the fixing bolt in the housing and tighten it.



Unscrew the nut



Glass headlight  
tilt upwards



Change batteries



Headlight hook up  
and closing

To replace the rear light batteries, follow the steps below:



Turn Phillips-  
screw open



Get  
bulb holder  
straight to  
rear loose



Replace batteries



Tighten the lamp



Incorrectly installed batteries can cause a defect in the headlight.  
So always pay attention to the + and - signs on the battery.

## Battery charging

If your Orthros is equipped with pedal assistance, check before you start cycling that the battery is still charged sufficiently. Depending on the capacity, charging takes between 3 and 6 hours. Always use the original battery charger supplied.

**ADVICE FROM KEVIN** Low ambient temperatures have an adverse effect on charging. At temperatures below 10 degrees, it is best to take the battery indoors and charge it at room temperature.

## Replacement of components

Is the Orthros defective or do components need to be replaced? We advise you to have this done by your Huka dealer. This is one way of preventing the manufacturer's guarantee from lapsing.

The following sizes must be used to replace the inner tube and/or outer tube:

- Inner and outer size front wheels: 55-507
- Inner and outer dimensions rear wheel: 55-406








Always have original Huka parts mounted on your duobike.  
Your Huka dealer can take care of this for you.



# Specifications

## Orthros

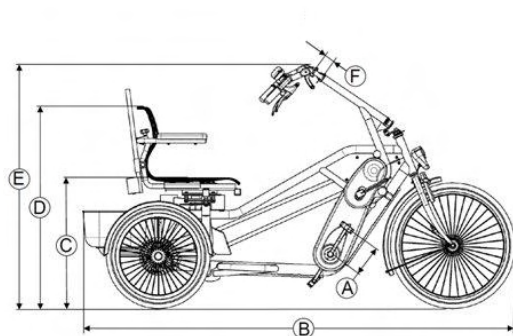
	Standard version
Frame material	Anti-corrosion treated steel
Coating	outdoor quality epoxy powder coating
Color 	Matt black (RAL9005) or white silk gloss (9016)
Wheels	double-walled rim and hub with stainless steel spokes
Tyres	A-brand anti-leakage tyre
Lightning	LED battery lighting front and rear
Call	sporty and easy-to-use bell
Mudguards	impact and form-retaining, plastic covered
Chain protection	Impact-resistant closed plastic chain guard
Stem	ergonomically adjustable
Handlebar	ergonomic adjustable
Seats 	Plastic seat shells incl. cushion set and adjustment slides*
Pedals 	metal with anti-slip
Front brakes	Shimano v-brake
Rear brakes	hydraulic disc brakes incl. parking brake*
Drive driver 	8 gear hub freewheel in combination with differential
Drive co-driver 	freewheel in combination with differential
Key lock	AXA Solid safety lock
Options	see price list for different options

\*The passenger seat is rotatable. The driver's seat is non-rotatable in the standard version.



### Standard version

Total length in mm (B)	1980
Wheelbase width/at the handlebars in mm	1040/1140
Weight in kg	78
Crank length in mm (A)	150
Driver/co-driver inside leg length in mm	650-850
Seat height to ground in mm (C)	min. 660
Seat width in mm per side	450
Seat depth in mm per side)	380
Back height in mm (D)	340
Handlebar height in mm (E)	1050-200
Maximum load driver/co-driver in kg	120/ 120
Maximum load in kg	240
Front tyre size in ETRTO	55-507
Front tyre size in inches	24 x 2,15
Tyre size rear in ETRTO	55-406
Tyre size rear in inches	20 x 2,15



**TIPS FROM STEPHEN** Do you have questions about the maintenance of your Orthros? Your Huka dealer will be happy to support you. In this manual we will also give you tips on how to maintain your duobike.

## Contact details Huka

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

Munsterstraat 13  
7575 ED Oldenzaal  
The Netherlands  
+31 541-572472  
info@huka.nl  
www.huka.nl/en

For questions about the maintenance of your Orthros, we refer you to your Huka dealer.

## Changes

Huka uses the philosophy of continuous product development and improvement. That is why the product delivered may deviate from the illustrations shown. Huka BV reserves the right to make changes to the product as described in this manual. No liability is owed for this. Misprints reserved.

For the latest version of the manual go to [www.huka.nl/en/manuals](http://www.huka.nl/en/manuals)

## Removal of product

Do you no longer use the Orthros? Then contact your Huka dealer. They can guide you with a possible sale or trade-in. If you want to get rid of your bike, you can also contact your local waste disposal company. They will dispose of the bike according to the applicable regulations and laws in your hometown.



If you want to replace the batteries or accumulators of your bicycle, please note that this is chemical waste. Therefore, make sure that it is disposed of properly.

## **Selling the duobike**

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

We advise you to have your duobike checked by your Huka dealer before selling them, so you can be sure that they are in good condition. Do you want to buy a used Huka bicycle? Then we advise you to have it checked by your Huka dealer. They can check for wear and tear and/or hidden defects.

## Your notes



# Huka makes your world easier

Based in Oldenzaal, we have been developing and producing bicycles that make a difference in the world of riders for more than 40 years.

## Innovative bicycles

Your mobility, independence and freedom is our passion. With a committed team, we supply a broad collection of innovative bicycles and other means of transport based on Dutch design. In our own country and far beyond. We are represented in America, Sweden, Norway, Belgium and Germany, among other countries. Our focus is not on providing products for people with a disability, but on providing solutions that keep you mobile.

## Always looking for the best solution

Our bikes can be used by anyone. Unlimited. If you like it and it offers you the functionality you are looking for, then a Huka fits you. Our team works together with visible pleasure on (new) solutions. That is what we go for every day. Unlimited. Always looking for the best solution.



Your Huka dealer