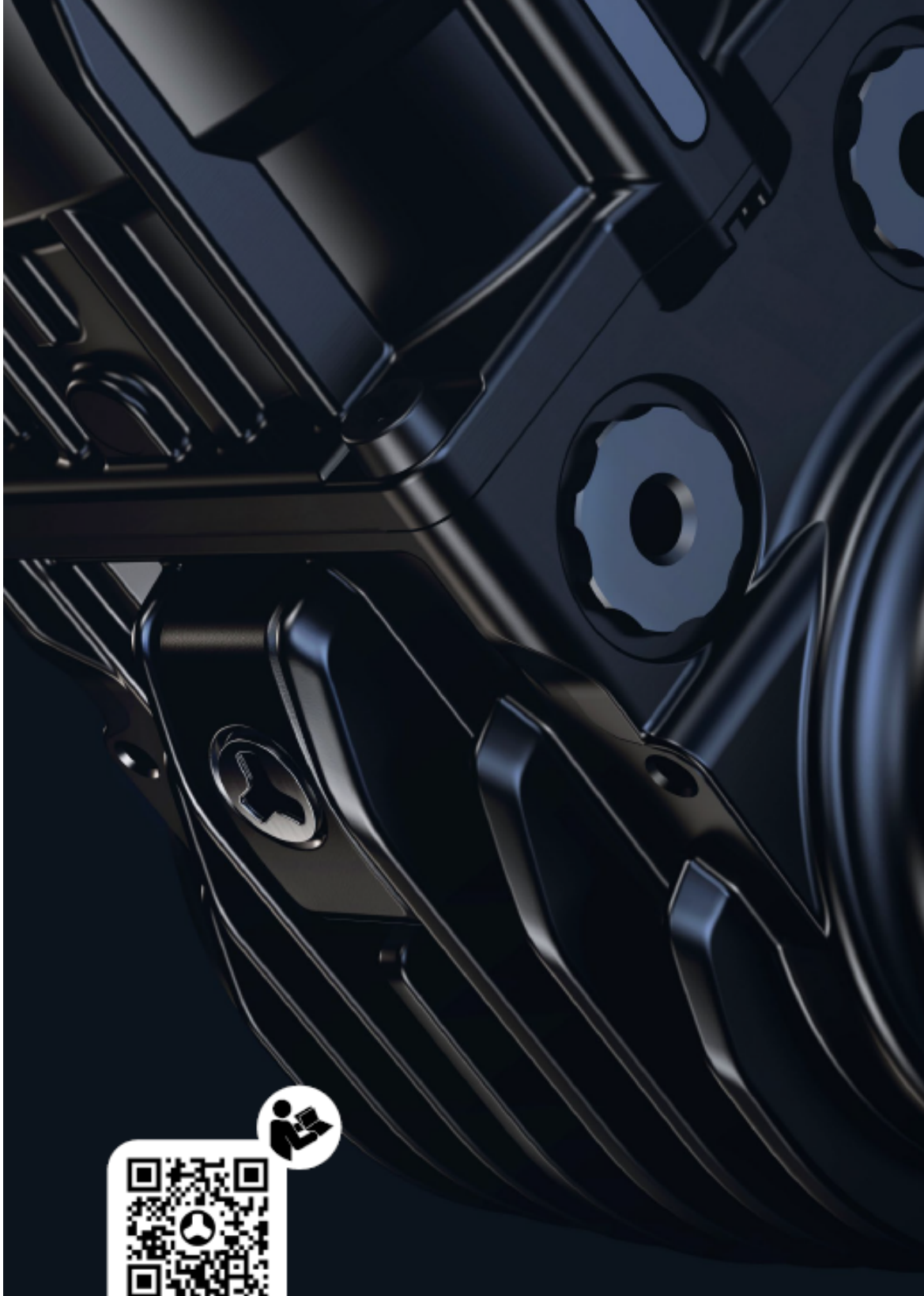




Frequently asked questions

FAZUA RIDE 60 DRIVE SYSTEM



FAZUA



Table of content

| | |
|---|-----------|
| All about the FAZUA RIDE 60 Drive System | 4 |
| Key facts | 4 |
| How long is the warranty period? | 5 |
| How is the electric support calculated? | 5 |
| What is the optimal cadence range? | 5 |
| What is the protection class/ IP code of the FAZUA RIDE 60 and the FAZUA ENERGY 430 battery? | 5 |
| FAZUA RIDE 60 DRIVE UNIT | 6 |
| Key facts | 6 |
| What is the efficiency of the drive? | 6 |
| How much of the input power is lost? | 6 |
| What is the Q factor? | 6 |
| What kind of freewheel have you installed? | 6 |
| Which crankset can I mount? | 7 |
| Which spider can I mount? | 7 |
| Why does FAZUA use a new axle standard for the RIDE 60? | 7 |
| Can I freely choose which chainrings I want to mount or would tuning problems arise? | 7 |
| What is the maximum number of teeth a chainring can have? | 8 |
| I want to change my brake disc. What do I need to take into consideration? | 8 |
| Do I need special tools? | 8 |
| With what torque do I tighten the screws on the FAZUA RIDE 60 DRIVE UNIT? | 8 |
| FAZUA LED HUB, CONTROL HUB and RING CONTROL | 9 |
| Key facts | 9 |
| How do I use the control; which colors indicate what? | 9 |
| What is the Boost function? | 10 |
| Can I charge my cell phone or other devices on the FAZUA Bike? | 10 |
| The ring of my control element is broken; how can I replace it? | 11 |
| Can I also mount the control element on the right side of the handlebar? | 11 |
| FAZUA ENERGY 430 and FAZUA CHARGER | 12 |
| Key facts | 12 |
| What is the range with a full battery charge? | 12 |
| How do I charge the battery? | 12 |
| How do I turn the battery on/off? | 13 |
| How can I extend my range? | 13 |
| How do I store the battery when I am not using my FAZUA Bike? | 13 |
| Does cold weather affect the behavior of the battery? | 14 |
| Can the battery pose a danger? | 14 |
| Will the battery be damaged if I do not charge it fully? | 14 |
| When is there a risk of deep discharge? | 14 |
| How do I dispose of the battery? | 14 |
| Can I use the FAZUA RIDE 50 charger? | 15 |
| About our software | 16 |
| Where can I get the FAZUA Toolbox Software? | 16 |
| How do I create a diagnostic report? | 16 |
| Can I change the wheel circumference? | 16 |
| How do I perform a firmware update? | 16 |
| Can riding parameters and the response behavior of the FAZUA RIDE 60 be changed and customized? | 17 |
| Connectivity: Bike computer + apps | 18 |
| Which digital devices can I connect to my FAZUA RIDE 60? | 18 |



| | |
|---|-----------|
| Is a connection via ANT+ also possible? | 18 |
| The FAZUA App asks me for the Connect ID number (code). What should I do? | 18 |
| I can't connect. What should I do? | 19 |
| Can driving parameters and the response behavior of the drive be changed and customized? | 19 |
| I can't connect to the FAZUA Rider App with my FAZUA Bike. What should I do? | 20 |
| General questions | 21 |
| Where can I find the manual for the FAZUA RIDE 60 Drive System? | 21 |
| Is the FAZUA RIDE 50 compatible with the FAZUA RIDE 60 Drive System? | 21 |
| Can I subsequently connect other components, such as lighting, to the FAZUA RIDE 60 Drive System? | 21 |
| Are security features, such as GPS modules or anti-theft protection planned for the FAZUA RIDE 60? | 21 |
| I have lost my key. How do I get a replacement? | 21 |
| Can the FAZUA Drive System be tuned to go faster than the legal speed limit? | 22 |
| Are there any plans to produce an S-pedelec? | 22 |
| Can I remove the FAZUA ENERGY 430 battery? | 22 |
| Can I ride the FAZUA RIDE 60 Bike without the motor and battery? | 22 |
| Can I buy a separate cover for the down tube in the online shop? | 23 |
| Is there a cover for the FAZUA RIDE 60 DRIVE UNIT? | 23 |
| How do I transport my FAZUA bike? | 23 |
| If the bearings are defective, can they be replaced or does the entire FAZUA RIDE 60 DRIVE UNIT have to be exchanged? | 24 |
| Can I build my own E-bike according to my own wishes with the FAZUA RIDE 60 Drive System? | 24 |
| Is there a FAZUA RIDE 60 Bike with belt drive on the market? | 24 |
| Which e-bikes and brands will be launched with FAZUA RIDE 60 Drive System? | 24 |
| Are there road bikes with FAZUA RIDE 60 Drive System? | 25 |
| Where can I test-ride a FAZUA RIDE 60 Bike? | 25 |
| How can I identify potential problems on the system? | 25 |
| The FAZUA Bike is making noises. What should I do? | 26 |
| The FAZUA Bike supports irregularly, what should I do? | 26 |
| Does the FAZUA RIDE 60 Bike have a walk assist function? | 26 |
| I am using my FAZUA Bike in a country that is not covered by FAZUA service. What should I do if I need a replacement part or want to make a warranty claim? | 26 |
| I have a service issue. What should I do? | 26 |
| I have a general question – how can I contact FAZUA? | 27 |
| Online shop EU | 28 |
| What components can I buy in the online shop? | 28 |
| Why can't I buy a complete system in the online shop? | 28 |
| What payment options does FAZUA offer? | 28 |
| How much are the shipping costs? | 28 |
| To which countries does FAZUA deliver? | 28 |
| Can I order something from FAZUA even if the destination country is not listed on the website? | 28 |
| Which logistics companies are used for shipping? | 28 |
| How can I return items? | 29 |



All about the FAZUA RIDE 60 Drive System

THE ULTIMATE DRIVE FOR AGILE AND LIGHT E-BIKES:

- Outstanding power-to-weight ratio in the smallest space.
- Elegant integration of the compact system enables aesthetically beautiful e-bikes
- Unique natural riding feeling and intuitive operation of the system through ergonomic controls.
- Powerful and natural support, always perfectly adapted to the riding situation.
- Highly efficient Drive System.

Key facts

| | |
|--------------------------------------|--------------------------------|
| Torque | 60 Nm |
| Nominal power | 250 W |
| Maximum power | 450 W* |
| Weight (motor + bottom bracket gear) | 1.96 kg |
| Weight of battery (removable) | 2.3 kg |
| Weight of battery (fix) | 2.2 kg |
| Battery capacity | 432 Wh |
| Voltage | 43.2 V |
| Interfaces | ANT+ / Bluetooth (BLE) / USB-C |
| Connectivity | FAZUA app for Android and iOS |
| Driving modes | 3 |
| Push assist: | Yes |
| Operating temperature | -5° to +45°C |

* Boost function



How long is the warranty period?

FAZUA provides a 24-month manufacturer's warranty on your FAZUA Drive System. The FAZUA ENERGY 430 battery must still have 60% of its capacity after 500 charging cycles (maximum 24 months). The warranty is valid for the Rider, we calculate the warranty period from the **date of sale at the dealer (invoice date)**.

How is the electric support calculated?

The FAZUA RIDE 60 measures your cadence several times per second and the torque applied to the pedals on both sides. Based on these two values and the set power characteristic, the system calculates the resulting motor power. The speed and therefore the limit of the support (depending on the wheel circumference) is determined by a speed sensor and magnet on the rear wheel.

The maximum assistance speed of FAZUA Bikes depends on the legal requirement of the respective market. The bike manufacturer is responsible for this set-up.

What is the optimal cadence range?

The FAZUA RIDE 60 provides you with the optimum support at a pedaling cadence between 55 and 125 crank revolutions per minute.

What is the protection class/ IP code of the FAZUA RIDE 60 Drive System and the FAZUA ENERGY 430 battery?

All components and parts of the FAZUA RIDE 60 are protected against the ingress of moisture and dust according to IP54. Please make sure that the connector plug in the down tube is dry and clean before inserting the battery. When charging, make sure that the FAZUA CHARGE PORT is dry and clean before connecting the FAZUA CHARGER.



FAZUA RIDE 60 DRIVE UNIT

Key facts

1. The FAZUA RIDE 60 DRIVE UNIT is the heart of the FAZUA RIDE 60 Drive System. It combines motor, gearbox, sensor technology and power electronics. The DRIVE UNIT weighs just 1.96 kg and its compact dimensions allow an elegant integration into the frame. It is permanently installed and cannot be removed. The result is an even more slimline and agile e-bike!
2. It delivers powerful support with up to 60 Nm of torque and up to 450 watts. Thus, the FAZUA RIDE 60 Drive System has the highest power density in its class. It is lightweight and quiet, powerful and compact – and inspires with its natural riding feeling.
3. Above the legal speed limit, the system decouples completely and you have no additional pedaling resistance.
4. The RIDE 60 provides handling as natural as you would expect from non-motorized bikes – with all the benefits of an e-drive. The best of both worlds = double fun!
5. RIDE 60 is the ideal support for smart commuters, endurance gravel/ road bikers and e-mountain bikers.

What is the efficiency of the drive?

In general, the FAZUA RIDE 60 Drive System achieves an average efficiency of ~80%. Although, this efficiency depends slightly on the motor speed and hence pedaling cadence.

How much of the input power is lost?

In total, you lose about 4 watts.

What is the Q factor?

The width of the axle is 135 mm. The Q-factor itself also depends on the specification of the installed crank arms. We can not provide a general Q-factor for the FAZUA RIDE 60, because it can vary depending on the FAZUA Bike due to the different crank arms. For detailed information, please contact your bike manufacturer.

What kind of freewheel have you installed?

Two freewheels are installed. In the FAZUA RIDE 60 DRIVE UNIT, a ratchet freewheel with 52 teeth is installed.

The decoupling of the motor from the bottom bracket shaft itself takes place by means of a sprag clutch.

With this freewheel, resistance is negligible when the motor is off or above the legal speed limit, and the motor and gears are not in motion when pedaling.



Which crankset can I mount?

A new standard applies for the shaft on the FAZUA RIDE 60. This standard was defined in cooperation with ROTOR and is called [ETOR Drive](#).

Since ETOR Drive is an open standard, a wide variety of possible manufacturers exist for finding the right crank arms for a certain bike. You can find an overview [here](#).

Which spider can I mount?

The spider is selected and mounted by the manufacturer of the e-bike. FAZUA does not supply its own spider at this time. For more information, please contact your dealer or the bike manufacturer.

The lockring for fixing the spider into place is a component of FAZUA and can be reordered via your dealer or a [FAZUA Certified Partner](#).

Why does FAZUA use a new axle standard for the RIDE 60?

With the FAZUA RIDE 60, we present a drive system that creates a particularly agile, natural and almost silent riding experience with its combination of power, intuitive operation and lightness.

For this ISIS did not meet our requirements anymore and a new standard for the shaft has been defined in cooperation with [ROTOR](#).

ETOR Drive is based on the material aluminum, which has made it possible to reduce the weight considerably without sacrificing fatigue strength and durability.

The diameter of the shaft has been significantly increased compared to the ISIS standard, which allows for increased stability while reducing the wall thickness.

The precise definition of the new standard makes it very precise and reliable, ensuring high compatibility between parts from different manufacturers.

Since ETOR Drive is an open standard, a wide variety of possible manufacturers exist for finding the right crank arms. You can find an overview [here](#).

Can I freely choose which chainrings I want to mount or would tuning problems arise?

As far as the drive is concerned, it doesn't matter. The decisive factor here is the contact with the chain stay. When mounting chainrings, please always follow the specifications of the bike manufacturer.

FAZUA is not liable for damage caused by incorrectly mounted chainrings.

Basically, the FAZUA RIDE 60 can be used with a bolt circle of 110 or 104 depending on the provided chainrings.

Tuning problems do not exist because the calculated speed or motor assistance does not depend on the number of teeth of the chainring.



What is the maximum number of teeth a chainring can have?

As far as the drive is concerned, it doesn't matter. The decisive factor here is the contact with the chain stay. When mounting chainrings, please observe the specifications of the bicycle manufacturer.

FAZUA is not liable for damage caused by incorrectly mounted chainrings.

I do not see a speed sensor/ magnet on the rear wheel of my FAZUA Bike. Where is it installed?

All FAZUA Bikes with the FAZUA RIDE 60 have a magnet attached to the brake disc or rear wheel axle. The speed sensor itself is also discreetly integrated into the frame.

I want to change my brake disc. What do I need to take into consideration?

On most FAZUA Bikes, the magnet for speed measurement is attached to the brake disc. The magnet can be retrofitted to the new brake disc. Please follow the bike manufacturer's instructions.

Do I need special tools?

It is not intended that you, as a rider, can independently replace or maintain individual components (caution: potential loss of warranty). If you need assistance, please contact your dealer or one of our [FAZUA Certified Partners](#).

With what torque do I tighten the screws on the FAZUA RIDE 60 DRIVE UNIT?

Our screws are factory-fitted with a special screw lock and should therefore not come loose. Therefore, you do not need to retighten the screws on your own because, every time you move the screw after the threadlocker has hardened, it loses its effect.

Please note that the screws from the FAZUA RACK, FAZUA CHARGE PORT and FAZUA SPEED SENSOR are **not** part of the FAZUA RIDE 60 Drive System; they are supplied by the bike manufacturer. Please contact them for replacement.

If screws are loose, please contact your dealer or one of our [FAZUA Certified Partners](#).

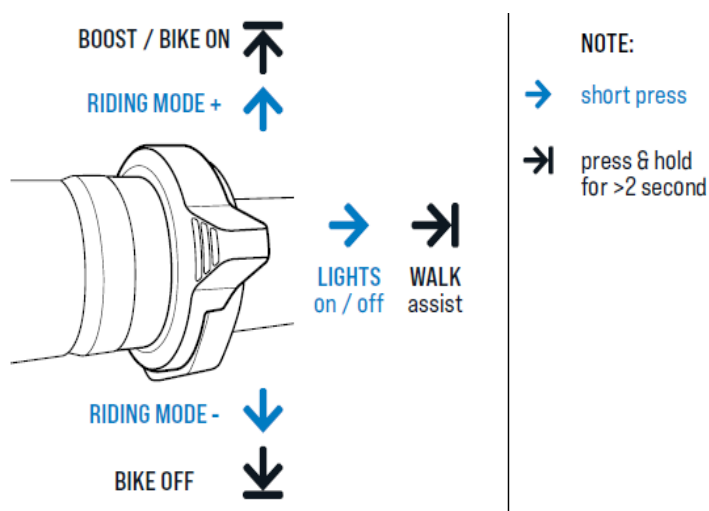


FAZUA LED HUB, CONTROL HUB and RING CONTROL

Key facts

1. The bike manufacturer decides which control element is installed on your FAZUA Bike. It chooses between:
 - FAZUA CONTROL HUB (combined control element and display) or
 - FAZUA RING CONTROL (control element) + FAZUA LED HUB on the top tube (display).
2. Both controls have exactly the same functionality, either combined on the handlebar or divided between the top tube and handlebar.
3. The LEDs show you the riding mode, charging status and possible errors.
4. The USB-C port is built into the FAZUA LED HUB or FAZUA CONTROL HUB.
5. Bluetooth and ANT+ chips are installed.
6. The elements cannot be exchanged or converted.

How do I use the control; which colors indicate what?



To **switch on**, hold the control switch up for at least 2 seconds.

To **switch off**, hold the control switch down for at least 2 seconds.

To switch to the **next higher** support level, briefly press the control switch up.

To switch to the **next lower** support level, briefly press the control switch down.

The colors of the LEDs indicate the currently selected support level:

When equipped with the FAZUA CONTROL HUB, the LEDs are integrated on the control on the handlebar.

When equipped with the FAZUA RING CONTROL, the LEDs are located in the FAZUA LED HUB installed in the top tube.

- The LED indicator lights up **white**: no support. You ride without electric assistance (as with a conventional bike).
- The LED indicator lights up **green**: "Breeze" support level. You ride with low but effective support for maximum range.



- The LED indicator lights up **blue**: "River" support level. You ride with reliable support for most use cases.
- The LED indicator lights up **pink**: "Rocket" support level. You ride with maximum support for very demanding tours.

Other functions:

- Boost function: Press the control switch up for at least 2 seconds.
- Walk assist 6 km/h: Press and hold the switch to the right with no support level (white LEDs).
- Light on/off: Briefly press the control switch to the right.

You can also find a detailed description in chapter 21 of our manual.

What is the Boost function?

In addition to the 3 regular riding modes (Breeze, River and Rocket), the FAZUA RIDE 60 Drive System has an additional feature: The Boost function.

To activate the Boost function, press and hold the control switch upwards for at least 2 seconds. The active Boost function is indicated by a flashing of the LEDs in the color of the active support level.

If no power is applied to the pedal within 2 minutes after activation, the Boost function automatically switches off again.

The Boost function allows you to ride briefly with an (increased) maximum motor power of **450 watts** so that you temporarily have even more thrust.

The duration of the additional thrust provided by the Boost function depends on the situation in which you activate it:

- If you activate the Boost function from a standstill, you will be propelled with more thrust for 4 seconds. Excellent for riding in front at the traffic lights!
- If you activate the Boost function while cycling, you will be propelled with more thrust for 12 seconds.

The Boost function is automatically deactivated after the above mentioned duration of 4 or 12 seconds or when you stop pedaling (e.g. when braking). The Boost function cannot be activated if:

- You are riding at a speed higher than the legal speed limit; in Europe, for example, this speed is more than 25 km/h / 20 mph.
- You have not selected any support level (the LEDs of the display light up white).

Can I charge my cell phone or other devices on the FAZUA Bike?

You can find a standard USB-C port on both FAZUA CONTROL HUB and FAZUA LED HUB, where you can easily charge any third-party devices. With a charging current of ~1 ampere, you can quickly supply your devices with power via "Fast Charging".



The ring of my control element is broken; how can I replace it?

The *Ergoring* is easily replaceable. You can get it from our [online shop](#).

Disassemble the handlebar grip (please follow the bike manufacturer's instructions), and pull the entire FAZUA RING CONTROL / CONTROL HUB off the handlebar. The ring itself is magnetically attached – you can replace it without tools and without much effort. Slide the FAZUA RING CONTROL / CONTROL HUB back onto the handlebar.

Please make sure to tighten the screw with a maximum of 0,5-1 Nm

Can I also mount the control element on the right side of the handlebar?

The FAZUA RING CONTROL or the FAZUA CONTROL HUB **cannot** be mounted on the right side of the handlebar. The design of the control element and the routing of the cables prevent side-inverted mounting.



FAZUA ENERGY 430 and FAZUA CHARGER

Key facts

| | |
|-------------------------------|-----------------------------------|
| Weight of battery (removable) | 2.3 kg |
| Weight of battery (fixed) | 2.2 kg |
| Battery capacity | 432 Wh |
| Voltage | 43.2 V |
| Charger | 3 A and 100-240 VAC. |
| Weight of charger | 630 g |
| Charging time | 3.5 h |
| Charging temperature | 0° to +35°C (ambient temperature) |

What is the range with a full battery charge?

The FAZUA RIDE 60 amplifies the muscle power dynamically and, at the same time, in optimum doses so that the motor support blends in naturally with the motion sequence.

The FAZUA riding experience is unique and offers the perfect blend of electric support and real riding fun for smart commuters, persistent gravel bikers and demanding e-mountain bikers.

Factors such as rider weight, tires, terrain traveled and temperature have a noticeable impact on range.

Depending on the support level **up to 140 km** or **up to 1600 hm**.

You can individualize the performance behavior via the Customizer in our FAZUA App or FAZUA Toolbox Software and thereby influence the range, therefore there is no reason for range concerns.

Please read our detailed description in the [Help Center](#).

How do I charge the battery?

To charge the FAZUA ENERGY 430 battery, please use **only** the original FAZUA CHARGER for the FAZUA RIDE 60 Drive System, which is compatible worldwide. This means that you can use it in the EU, just as you can in the USA, for example.

A complete charge takes about 3.5 hours at 3 amps and 100-240 V AC.

On most FAZUA RIDE 60 Bikes, the charging socket is placed in different locations on the frame depending on the bike manufacturer.



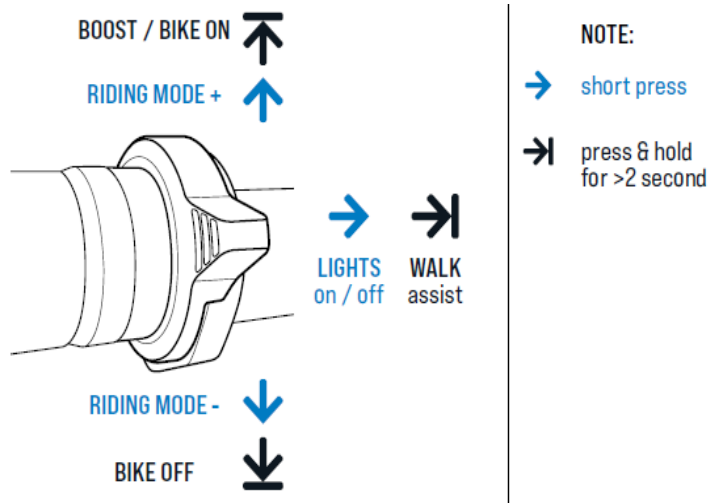
If you can remove the battery from your FAZUA Bike (depending on the model), you can decide for yourself whether you want to charge it inside the FAZUA Bike or outside.

The FAZUA CHARGER for the FAZUA RIDE 50 Drive System is not compatible.

How do I turn the battery on/off?

To **switch on**, hold the control switch up for at least 2 seconds.

To **switch off**, hold the control switch down for at least 2 seconds.



The battery itself does not have a physical on/off button.

It is equipped with a motion sensor and detects when the FAZUA Bike is in use.

You can turn the FAZUA Bike on and off at any time by pressing the control switch down for at least 1 second.

You do not have to actively turn off the battery since it turns itself off after a short period of inactivity.

How can I extend my range?

There are currently two options available here:

1. You can buy another FAZUA ENERGY 430 battery in our [online shop](#).
2. The range depends on many factors. With our Customizer, available in the FAZUA App or FAZUA Toolbox Software, you can individualize the performance factors of your FAZUA Bike and this influences the range.

You can find a detailed description in the [Help Center](#).

How do I store the battery when I am not using my FAZUA Bike?

The general rule for lithium-ion batteries is that they should always be stored between 10°C and 15°C. If not used during the winter, the battery should be charged to a minimum of 60% and then checked every 8 weeks and recharged if necessary. If the battery is not used for a long period of time and stored at low temperatures, a deep discharge may occur and the battery will be irreparably damaged.



Does cold weather affect the behavior of the battery?

Generally speaking, lithium-ion batteries work best at moderate temperatures. Frost and cold in winter can have a negative effect on the range.

This applies to both electric cars and bikes with e-drives. A well-known characteristic of all lithium-ion batteries is their sensitivity to low temperatures due to the chemistry used, in which temperature effects occur. At temperatures below 10°C, this generally results in charging time being extended, power being reduced and available energy decreasing.

It is therefore quite possible that the battery will lose 20% or more of its capacity when stored overnight in the garage, depending on the temperature. The situation is different when the FAZUA ENERGY 430 battery is stored at room temperature and then inserted into the FAZUA Bike at cold temperatures and started up; due to the power output, the FAZUA ENERGY 430 warms up and virtually regulates itself during the ride.

The negative effects at low temperatures not only affect our battery, but all batteries equipped with lithium-ion cells.

Can the battery pose a danger?

Undamaged lithium-ion batteries normally pose no danger.

However, if there is a defect due to external damage or to the cell itself, a lithium-ion battery is a "hazardous fire source" because it cannot be extinguished with conventional extinguishers if they catch fire.

Here, the biggest danger is during charging since a large amount of energy is added to the battery.

Will the battery be damaged if I do not charge it fully?

Quite the opposite. For a long life of a lithium-ion battery, it is best to keep it in the range between 30 and 80% charge capacity. Studies by cell manufacturers have shown that the life of a cell increases significantly if it is not fully charged. If a battery is only ever charged to 80%, its service life is doubled because the high voltage range, in which the cell chemistry is particularly stressed, is avoided.

When is there a risk of deep discharge?

If the battery is not used for a long time without being charged, deep discharge may occur, which often damages the battery irreparably. This is not covered by the warranty.

You are therefore advised to check the charge level of your battery regularly and to charge the battery if the system is not used for a longer period of time.

If not used during the winter, the battery should be charged to a minimum of 60% and then checked every 8 weeks and recharged if necessary.

How do I dispose of the battery?

A lithium-ion battery is a hazardous material that must be taken to a collection point or recycling center for disposal. Alternatively, you can also contact your dealer or one of our [FAZUA Certified Partners](#).



Can I use the FAZUA RIDE 50 charger?

No, the FAZUA CHARGER for the FAZUA RIDE 50 drive System is not compatible with the RIDE 60 Drive System.



About our software

Where can I get the FAZUA Toolbox Software?

You can download our standalone software for free on our website under [Downloads](#). With this you can read out, update, diagnose and individually adjust the FAZUA RIDE 60 Drive System to your desired riding behavior via USB-C cable on your computer. You can find a detailed description in the [Help Center](#). It is the same software as already for our FAZUA RIDE 50 Drive System.

How do I create a diagnostic report?

You can create a diagnostic report using our FAZUA Toolbox Software by connecting your FAZUA Bike to your computer with a standard **USB-C cable**. You will find the USB port on the FAZUA LED HUB or on the FAZUA CONTROL HUB, depending on the equipment. You can download our FAZUA Toolbox Software for free on our website under [Downloads](#).

Now open the software and go to the "Diagnosis" tab and click "Run Diagnosis Test" and then save the diagnostic report; a PDF will be generated.

Important:

- Make sure that the report is always generated with the latest FAZUA Firmware and FAZUA Toolbox Software.
- Please make sure the FAZUA ENERGY 430 is on and installed into the FAZUA Bike while generating the report so we can get the information from all components.

Alternatively, please contact your dealer or one of our [FAZUA Certified Partners](#).

Can I change the wheel circumference?

You cannot, but one of our FAZUA Certified Partners can adjust the wheel circumference by + / - 5%. You can find our Dealer Locator [here](#).

Unfortunately, we as the drive manufacturer cannot accept any responsibility for major deviations, as this value is used to calculate the legal support speed. For a larger adjustment, please contact the bike manufacturer directly.

How do I perform a firmware update?

Basically, we always recommend to ride with the latest FAZUA Firmware, because only with the latest version the optimal riding experience is guaranteed. You can easily install a FAZUA Firmware update on your FAZUA Bike with our FAZUA Toolbox Software. You can download the software for free on our website under [Downloads](#).

Connect your FAZUA Bike with a standard **USB-C cable** to the computer, you will find the USB port on the FAZUA LED HUB or on the FAZUA CONTROL HUB depending on the equipment. Now open the software and go to the "Firmware Update" tab. Click "Update now", select



"Online" and click "Start". After a few seconds, your FAZUA Bike is up to date. On the "Product Information" tab, you can check the current firmware version under the FAZUA RIDE 60 DRIVE UNIT. You can find a detailed description in the [Help Center](#).

Can riding parameters and the response behavior of the FAZUA RIDE 60 Drive System be changed and customized?

Yes, you can individualize the riding characteristics (Max Power, Support Relation and Ramp-Up) via the FAZUA App or in the FAZUA Toolbox Software:

1. Max Power
This parameter controls the maximum torque and power output. In the Eco preset, the Max Power is lowered. This reduces energy consumption. The peak power output is higher in the performance preset. As a result, energy consumption is greater and the range is reduced. You can set the value to a maximum of 350 watts. The 450 watts can only be accessed via the Boost function.
2. Support Relation
The Support Relation determines the relationship between rider power and motor assistance. If the value is low, the motor provides its maximum assistance even at low rider power. If the value is set high, more power must be applied for the motor to reach its Max Power.
3. Ramp-Up
The Ramp-Up determines the responsiveness of the motor and the strength of the acceleration. In a gentle setting, the motor accelerates with a slight delay and very smoothly. In the reactive setting, the engine reacts fast and accelerates significantly more.

You can find a detailed description in the [Help Center](#).



Connectivity: Bike computer + apps

Which digital devices can I connect to my FAZUA RIDE 60?

With the FAZUA RIDE 60, you can connect to three devices at the same time using the BLE interface. The following devices are currently available:

1. Various **bike computers**. Here you can find a detailed [article](#) with the possible functions and a sample list of compatible devices. Our troubleshooting article can be found [here](#).
2. Our **FAZUA App**. You can find a detailed description in the [Help Center](#).
3. Our **FAZUA Dashboard for Garmin Devices**. You can find a detailed description in the [Help Center](#).

Attention:

- Our FAZUA RIDE 60 cannot be paired with the existing FAZUA Rider App! The functions from this app will soon be integrated into the FAZUA App as well.
- The FAZUA RIDE 60 also has an ANT+ chip installed, but no devices can be paired with this interface at launch. In the future, however, there will of course be applications and functions that use this standard. FAZUA is known to continue to develop its drive systems with many innovations and great features so stay tuned and please be patient!

Is a connection via ANT+ also possible?

The FAZUA RIDE 60 Drive System has an ANT+ chip.

However, it is not yet in use at launch. In the future there will of course be applications and functions that use this standard.

FAZUA is known to continue to develop its drive systems with many innovations and great features so stay tuned and please be patient!

The FAZUA App asks me for the Connect ID number (code). What should I do?

The Connect ID number is a short sequence of numbers (code) that is required as security verification for the initial connection of your FAZUA Bike with the FAZUA App on your cell phone.

On delivery of your FAZUA Bike, you will find it on a hangtag on the handlebar or top tube.

If you do not find a hangtag on your FAZUA Bike, please contact a [FAZUA Certified Partner](#) who can read out the Connect ID to you.

Alternatively, please submit your request via our [contact form](#). A complete [diagnostic report](#) is mandatory for this purpose. We will get back to you shortly.



I can't connect. What should I do?

With the FAZUA RIDE 60, you can currently connect to our FAZUA App, bike computers and the FAZUA Dashboard for Garmin Devices via the BLE interface.

A link to the FAZUA Rider App is not possible, nor is an ANT+ interface currently available.

FAZUA App troubleshooting:

1. The FAZUA ENERGY battery is switched on.
2. The cell phone has an Internet connection.
3. The cell phone is near the FAZUA Bike.
4. There is no other cell phone nearby that could connect to the FAZUA Bike.
5. LEDs light up on the remote, either white, blue, green or pink.
6. You have installed the latest version of the FAZUA App (check the store).
7. Can the rider's cell phone be connected to another Bluetooth device (e.g. headphones)?
8. Can you connect another phone to your FAZUA Bike (it is recommended to try both iPhone and Android)?
9. Decouple the FAZUA Bike from the app.
10. Close the app in the background.
11. Open the Bluetooth settings of the phone.
12. Search for the FAZUA Bike in the list of "previously paired devices".
13. Tap on the FAZUA Bike ID and then on "Delete device".
14. Turn Bluetooth off for 3 seconds and then on again.
15. Open the FAZUA App and try to pair and connect the FAZUA Bike again.

Please read our articles on connectivity in the [Help Center](#).

Can driving parameters and the response behavior of the drive be changed and customized?

You can customize the driving characteristics (Max Power, Support Relation and Ramp-Up) in both the FAZUA app and the FAZUA Toolbox software.

1. Max Power
This parameter controls the maximum torque and power output. In the Eco preset, the Max Power is lowered. This reduces energy consumption. The peak power output is higher in the performance preset. As a result, energy consumption is greater and the range is reduced.
You can set the value to a maximum of 350 watts. The 450 watts can only be accessed via the Boost function.
2. Support Relation
The Support Relation determines the relationship between cyclist power and motor assistance. If the value is low, the motor provides its maximum assistance even at low cyclist power. If the value is set high, more power must be applied for the motor to reach its Max Power.
3. Ramp-Up
The Ramp-Up determines the responsiveness of the motor and the strength of the acceleration. In the gentle setting, the motor accelerates with a slight delay and very smoothly. In the reactive setting, the engine reacts faster and accelerates significantly more.

You can find a detailed description in the [Help Center](#).



I can't connect to the FAZUA Rider App with my FAZUA Bike. What should I do?

The FAZUA RIDE 60 Drive System is not compatible with the FAZUA Rider App. Well-known functions of the FAZUA Rider App, such as trip recording or live display of ride data, will soon be integrated into the FAZUA App.



General questions

Where can I find the manual for the FAZUA RIDE 60 Drive System?

You can download the complete digital manual free of charge from our [website](#).

Is the FAZUA RIDE 50 compatible with the FAZUA RIDE 60 Drive System?

No, the systems are self-contained and not compatible. Unlike the RIDE 50 Drive System, the FAZUA RIDE 60 DRIVE UNIT is the heart of the system and combines the motor, gearbox, sensors and power electronics.

We are expanding our portfolio with the FAZUA RIDE 60 Drive System, offering riders and bike manufacturers an alternative to the existing FAZUA RIDE 50 Drive System. By combining the motor and gearbox in the FAZUA RIDE 60 DRIVE UNIT, the weight and the required installation space are reduced. In addition, the possibility of installing the battery separately from the drive gives the bike manufacturer more freedom in the design of the bikes and the mounting options.

This combination allows for handling as natural as you would expect from non-motorized bikes – with all the benefits of an e-drive. The best of both worlds and therefore even more cycling fun. The result is therefore even more slimline and sportier E-bikes!

Can I subsequently connect other components, such as lighting, to the FAZUA RIDE 60 Drive System?

Yes, but such components must be installed for you by a professional bike shop (caution: potential loss of warranty).

Please contact your dealer or one of our [FAZUA Certified Partners](#).

Specifications for external electrical components:

- Maximum voltage: 12 V **per** component
- Maximum current: 2 A **in total for** all components
- Maximum power: 24 W **in total for** all components

Are security features, such as GPS modules or anti-theft protection planned for the FAZUA RIDE 60 Drive System?

FAZUA does not offer any security features at present. Please contact the bike manufacturer and check what options they offer you.

However, FAZUA is known for continuing to develop its drive systems with many innovations and great features, so stay tuned and please be patient!

I have lost my key. How do I get a replacement?

The installed lock is produced by the third-party supplier Abus.



If the key is lost, you can reorder it directly here:

>> <https://schluesselservice.abus.com/>

If you do not know the key number, you can read it in our [FAZUA Toolbox Software](#). Create and save a [diagnostic report](#); in the PDF, you will find the key number under the FAZUA RIDE 60 DRIVE UNIT information. Please make sure that the battery is on and the FAZUA Bike is connected while generating the report.

Can the FAZUA Drive System be *tuned* to go faster than the legal speed limit?

No, we must stick with the legal speed limit. Tampering with our FAZUA Drive System will void the warranty. In Europe, our system is limited to 25 km/h / 20 mph by European laws. Depending on the country, the speed limit may vary.

Therefore, there is no way for us and retailers to increase the assisted speed for you and additionally, the responsibility of the max. speed setting lies with the bike manufacturers.

[Please also keep in mind](#) that you and any retail shop worldwide make themselves criminally liable by tuning in the event of tampering, the permission to use the E-bike/pedelec also expires and your insurance will not apply in the event of an accident.

Are there any plans to produce an S-pedelec?

On the European market, none of our bike manufacturers are currently planning to launch an S-pedelec. Since the motor is completely decoupled above 25 km/h / 20 mph via the freewheel and you can ride as fast as you want, without the need of a S-Pedelec.

Can I remove the FAZUA ENERGY 430 battery?

Depending on the bike manufacturer, you can remove the battery and therefore charge it outside the FAZUA Bike. In case of service, the permanently installed battery can of course also be removed by a professional bike shop.

You can easily identify a removable FAZUA ENERGY 430 battery by the cutout and the removal option on the down tube.

With a permanently installed FAZUA ENERGY 430 battery, the down tube is continuous and has no recess.

The FAZUA ENERGY battery can be removed from the FAZUA Bikes from Riese & Müller and Canyon.

Can I ride the FAZUA RIDE 60 Bike without the motor and battery?

The motor is permanently mounted in the FAZUA RIDE 60 DRIVE UNIT and modular removal is not possible. It is the heart of the system. It combines motor, gearbox, sensor technology and power electronics. This concept allows an even better integration of the



FAZUA RIDE 60 into the frame. The design of the entire drive system becomes more slimline and gives bike manufacturers even more freedom in the design of FAZUA Bikes. If the FAZUA ENERGY 430 battery is removable, you can usually put the cover on and ride the FAZUA Bike without the battery.

Unlike the FAZUA RIDE 50 Drive System, where the battery and motor are removable, this is no longer the case with the FAZUA RIDE 60 Drive System.

Canyon's FAZUA Bikes are an exception here, as Canyon's cover is permanently connected to the FAZUA ENERGY battery.

Can I buy a separate cover for the down tube in the online shop?

No, a cover is not offered by FAZUA because the dimensions of the cutout in the frame can vary depending on the model. The final specification of each FAZUA Bike is entirely in the hands of the bike manufacturer. For more information, please contact your bike manufacturer.

Is there a cover for the FAZUA RIDE 60 DRIVE UNIT?

No, a cover for the FAZUA RIDE 60 DRIVE UNIT is not offered by FAZUA directly because the final specifications of each FAZUA bike is entirely up to the bike manufacturer.

In any case, the radiator must remain free for heat dissipation. Some bike manufacturers design the FAZUA bike already from the factory with appropriate cover, which optimally meets the requirements. For more information, please contact your bike manufacturer.

How do I transport my FAZUA bike?

- **Airplane:**
In principle, FAZUA Bikes with a removable FAZUA ENERGY 430 battery can be transported in airplanes without any problems. The permanently installed FAZUA RIDE 60 DRIVE UNIT is no obstacle.
However, you cannot take the FAZUA ENERGY 430 battery itself on a passenger aircraft because it is considered a dangerous good by IATA. You currently have two options for taking your FAZUA battery with you on vacation:
 - By sending the battery by mail/air freight to your vacation destination beforehand
 - Contact a [FAZUA Certified Partner](#) at your destination and ask for a loaner battery

Attention: This applies only to the FAZUA Bikes with removable battery. If the FAZUA ENERGY 430 battery is permanently installed in your FAZUA Bike, you unfortunately cannot take it with you by airplane.

Important: In any case, please contact the respective airline about the exact transport conditions for e-bikes/pedelecs before your flight.

- **Car:**
If you want to transport your FAZUA Bikes outside the car (roof or rear rack), please pay attention to the following:
 - If you are able to remove the FAZUA ENERGY 430 battery, store it safely in the car and follow the bike carrier manufacturer's instructions.



- If the FAZUA ENERGY 430 battery is permanently installed, place the entire FAZUA Bike on the carrier and follow the bike carrier manufacturer's instructions.

When transporting your FAZUA Bike inside the car, please ensure that the bike is adequately secured against slipping or falling over.

If the bearings are defective, can they be replaced or does the entire FAZUA RIDE 60 DRIVE UNIT have to be exchanged?

We have deliberately installed extremely large and durable bearings to avoid creaking bearings. The bearings are oversized and can not be compared with a conventional bottom bracket. We use only components from the automotive industry. Individual bearings cannot be replaced on the FAZUA RIDE 60 DRIVE UNIT. If you suspect a defect, please contact your dealer or one of our [FAZUA Certified Partners](#).

Can I build my own E-bike according to my own wishes with the FAZUA RIDE 60 Drive System?

This is a great thought, but unfortunately not doable. Our FAZUA RIDE 60 Drive System can only be purchased and installed by bike manufacturers from us. Our systems are delivered unconfigured, and only bike manufacturers receive the software to play necessary data on the FAZUA Bike, without which the FAZUA Bike would not work. We do not sell individual components of the FAZUA RIDE 60 Drive System to riders.

Is there a FAZUA RIDE 60 Bike with belt drive on the market?

Yes, Riese & Müller offers the FAZUA Bike with belt drive; for details, feel free to check the homepage of the [bike manufacturer](#)!

Which e-bikes and brands will be launched with FAZUA RIDE 60 Drive System?

The FAZUA RIDE 60 Drive System is installed in FAZUA Bikes from Riese & Müller and Canyon at launch.

Brands and models will be released soon, including urban bikes, fitness bikes, full suspension bikes, gravel bikes and commuters with FAZUA RIDE 60.

The current selection of available FAZUA Bikes with the FAZUA RIDE 60 Drive System can be found [here](#).



Are there road bikes with FAZUA RIDE 60 Drive System?

Currently, no bike manufacturer plans a pure FAZUA road bike with the FAZUA RIDE 60. FAZUA gravel bikes with the FAZUA RIDE 60 will soon be available. Otherwise, check out the [selection](#) of FAZUA road bikes with the FAZUA RIDE 50 Drive System – perhaps your next bike is already there.

Where can I test-ride a FAZUA RIDE 60 Bike?

You can easily arrange a test ride of **Riese & Müller** FAZUA Bikes online via their [Dealer Locator](#).

FAZUA Bikes from **Canyon** can be test-ridden with prior appointment in their [showroom in Koblenz](#).

Canyon is present at many events and festivals and plans to be on site with a fleet of FAZUA test bikes. You can find their event calendar [here](#).

Surely FAZUA Bikes with RIDE 60 Drive System of all brands will also be presented this year at various festivals and bike shows – come take a look!

Events in which FAZUA will have test bikes available:

- E Bikes Days Munich, April 22 – 24, 2022
- Bike Festival Garda Trentino, 4/29 – 5/1/2022
- More dates to follow

How can I identify potential problems on the system?

The upper LED on the FAZUA LED HUB or CONTROL HUB is also the status indicator, which shows either a status change or fault is present. This indicator then flashes green, yellow or red.

Possible status displays:

- The upper LED flashes green = "Ready for operation". After successful installation of the FAZUA ENERGY 430 battery in the FAZUA Bike, the status indicator briefly flashes green, indicating that you can now switch on the drive system using the control element.
- The upper LED flashes yellow = "Soft Fault". When a "Soft Fault" occurs, the status indicator flashes yellow. The drive system thereby signals that there is a temporary or non-critical malfunction, which can lead to a loss of performance in most cases. If a "Soft Fault" occurs, you can continue to ride the FAZUA Bike, but we advise immediate maintenance.
- The upper LED flashes red = "Hard Fault". When a "Hard Fault" occurs, the status indicator flashes red. If a "Hard Fault" occurs on your FAZUA Bike, it will not operate and will require service.

For maintenance, we ask you to bring your FAZUA bike to your dealer or one of our [FAZUA Certified Partners](#).



The FAZUA Bike is making noises. What should I do?

Please check the usual causes:

- Check the pedals, chainring and crank arm for a tight fit and tighten according to the manufacturer's instructions, if necessary.
- Check the chain, chainring, derailleur for wear and dirt and clean or replace if necessary

As you may not service our FAZUA RIDE 60 Drive System on your own (caution: potential loss of warranty), we ask that you contact your dealer or one of our [FAZUA Certified Partners](#) for further analysis.

The FAZUA Bike supports irregularly, what should I do?

A possible cause is that the torque sensor has become decalibrated, leading to jerky or irregular support. The FAZUA RIDE 60 can detect this problem automatically and calibrate itself during the ride.

This is because our system has an automated calibration function that kicks in independently. You do not have to do anything to activate this calibration, just continue riding normally for 30 minutes.

If this does not resolve the rough ride, please contact your dealer or one of our [FAZUA Certified Partner](#) for further analysis.

Does the FAZUA RIDE 60 Bike have a walk assist function?

Yes, the FAZUA RIDE 60 has a walk assist function.

To activate, press the control switch of the FAZUA CONTROL HUB or the FAZUA RING CONTROL to the right for 2 seconds with the assistance switched off (white LEDs).

Your FAZUA Bike can then reach a speed of up to 6 km/h depending on the gear engaged as long as the button is pressed continuously.

See also chapter 21.6 of our RIDE 60 manual.

I am using my FAZUA Bike in a country that is not covered by FAZUA service. What should I do if I need a replacement part or want to make a warranty claim?

Our FAZUA Drive Systems are certified exclusively for the European, North American and Australian markets and we are only allowed to offer service and sell aftersales items in these markets. If you have a service request or need a spare part, please contact the bike manufacturer directly. FAZUA is expanding rapidly and we are working to obtain approvals worldwide soon.

I have a service issue. What should I do?

No component of the FAZUA RIDE 60 Drive System can be repaired by the riders themselves. Also, please do not open any of the components (attention: potential loss of warranty).



Your dealer or one of our [FAZUA Certified Partners](#) will be happy to assist you. Of course, you can also make a complete [diagnostic report](#) yourself and submit it as a warranty request via our [contact form](#) and you will receive further instructions from us.

I have a general question – how can I contact FAZUA?

We are happy to help with any questions you may have about our drive; just submit your request via our [contact form](#). We will get back to you as soon as possible.



Online shop EU

What components can I buy in the online shop?

For the FAZUA RIDE 60 Drive System, you can currently purchase the FAZUA ENERGY 430 battery, the FAZUA CHARGER, the crank arms from ROTOR, and other components in our [online shop](#). More articles will follow in the course of the year.

Why can't I buy a complete system in the online shop?

Only bicycle manufacturers may purchase our FAZUA RIDE 60 drive system directly from us and install it. Our systems are delivered unconfigured, and only bicycle manufacturers receive the necessary software to play necessary data on the FAZUA bike, without which the FAZUA bike would not work.

We do not sell individual components of the FAZUA RIDE 60 drive system to cyclists.

What payment options does FAZUA offer?

You can pay with credit card, PayPal or immediate bank transfer (debit card).

How much are the shipping costs?

You can find the current shipping costs in our [online shop](#).

To which countries does FAZUA deliver?

You can find the list of countries in our [online shop](#).

Can I order something from FAZUA even if the destination country is not listed on the website?

No, that is not possible in principle. However, Riders in Switzerland can order from our service partner [Ampere Plus AG](#).

Riders from the USA/ Canada can order through their dealer or one of our [FAZUA Certified Partners](#) via our service partner QBP.

Riders from Australia/ New Zealand can order through their dealer or one of our [FAZUA Certified Partners](#) via our service partner VIMM Ltd.

Which logistics companies are used for shipping?

Within Germany, we ship goods with GLS. The international shipment of goods is carried out by UPS and Dachser.



How can I return items?

- If you would like to report a warranty claim, please contact us directly via our [contact form](#).
- If you would like to return items for other reasons, please enter your request in our [returns portal](#). The statutory 14-day right of return applies.

Attention: If you want to return a battery, please contact us directly via our [contact form](#). As batteries are class 9 dangerous goods, special transport conditions apply here.