

**NOX
CYC
LES**
NOXCYCLES.COM



USER MANUAL

Thank you for choosing a NOX hybrid bike!

With a NOX bike you have not only purchased an extraordinary high-quality e-bike with outstanding performance but also a piece of our beautiful corporate history.

We welcome you in our NOX family – from now on you will make history as well!

Your NOX team

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1 Safety instructions

WARNING

There is a risk of injury if you disregard the safety instructions!

Non-observance of safety information and instructions can lead to an electrical shock, fire and/or serious injuries.

Please observe all safety information and instructions both in these and in all other instructions included with the e-bike.

- CAUTION: Risk of burns from touching the motor casing.
- CAUTION: Risk of injury if the e-bike system is activated unintentionally. Please remove the rechargeable battery before working on the e-bike (e.g. assembly, maintenance, working on the chain etc.), or transporting or storing it.
- CAUTION: Risk of injury when using the pushing aid without the wheels touching the floor.
- CAUTION: Please do not make any changes to your e-bike. Never try to increase the performance capability of the e-bike; otherwise, you could reduce the service life of the parts and risk damage to the e-bike system and to the e-bike. Also, any manipulation of the e-bike system will invalidate the guarantee and warranty. Incorrect handling of the system also poses a risk to your safety and others on the road. If any unauthorised changes are made to the e-bike system, there is a risk of high personal liability costs or even criminal proceedings, if the accident is a result of the manipulation.
- Observe all national regulations relating to the approval and use of e-bikes.
- Never open the motor. This is maintenance-free and may only be repaired by qualified specialists and only using original spare parts. This retains the motor safety. If the motor is opened without authorisation, the warranty becomes invalid.
- All components and parts of the e-bike should only be replaced by qualified specialists and may only be replaced with parts approved by the cycle manufacturer. This protects the motor from damage (e.g. from overloading).
- Read and observe the safety instructions and information in the operating instructions of the rechargeable battery and in the e-bike operating instructions.
- Keep all components and parts of the e-bike clean, especially the contacts of the rechargeable battery and its bracket. Clean it carefully with a soft and dry cloth.
- None of the components, including the motor, may be dipped into water or cleaned with a high-pressure device.
- Please contact an authorised dealer for servicing or repairs to the e-bike.
- Please keep these instructions for future reference.

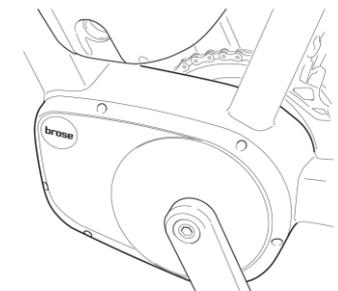
These safety instructions apply to all subsequent chapters!

2 Motor

2.1 Intended use

The motor is only designed to drive your e-bike and may not be used for other purposes. The e-bike system is only functional when the display is mounted. For more information about using the e-bike, please refer to chapter 3.

The illustrations are outlines only, details may vary on your e-bike.



2.2 Operating and cycling advice

When does the e-bike drive work?

The Brose Drive S mid-engine provides electromotor support to the cyclist in a Pedal Electric Cycle (Pedelec). The support provided depends on the force applied by the cyclist onto the pedals. The e-bike drive only provides support, if the cyclist is pedalling. This is independent of the support level.

Shut-off at over 25 km/h

The e-bike drive switches off automatically at speeds in excess of 25 km/h. If the speed drops below 25 km/h, the support starts again automatically.

Pushing aid

One exception is the pushing aid function that allows the e-bike to be pushed easily without pedalling at a speed of up to 6 km/h.

NOTE

Pedals turn when the pushing aid is activated!

Cycling without support

You can ride the e-bike like a normal bike at any time by either switching off the e-bike system or setting the support level to **Off**. The same applies when the rechargeable battery is empty.

Familiarisation

Take some time to familiarise yourself with your e-bike before you use it in normal road traffic. Test the various support levels until you feel safe handling this product. Before going on longer trips, familiarise yourself with how different parameters and ambient conditions impact on the range of your e-bike.

Motor setups

The e-bike system supports several motor setups. The standard setup across the four support levels is as follows: 40% - 80% - 160% - 320%

These levels can be adjusted individually, however, never set higher than the maximum percentage. Please consult a certified bicycle dealer.

Range

No valid statement can be made about the average range of an e-bike. The general rule is: the higher the support level, the lower the range. The range is affected by many other factors, such as:

- Switching behaviour
- Type of tyres
- Tyre pressure

- Age, care and charging status of the rechargeable battery
- The route profile (gradients) and quality (surface)
- Weather conditions (e.g. oncoming wind, ambient temperature etc.)
- Weight of the e-bike
- Weight of the rider
- Load

Careful handling

Please observe the operating and storage temperature of the e-bike components. Protect the motor, display and rechargeable battery from extreme temperatures (e.g. intensive sunshine without ventilating at the same time). The components (especially the rechargeable battery) can be damaged by extreme temperatures.

2.3 Maintenance and cleaning

Keep all components of the e-bike clean, especially the contacts of the rechargeable battery and its bracket. Clean this carefully with a dry and soft cloth. Never use oil except for the chain. None of the components, including the motor, may be dipped into water or cleaned with a high-pressure device.

In order to avoid increased electrical conductivity, moisture bridges and corrosion at seals and electrical contact points and to extend the life of your e-bike, we recommend cleaning with a special e-bike cleaner (for example TUNAP SPORTS e-bike cleaner).

Please contact an authorised dealer for servicing or repairs to the E-Bike.

2.4 Inspection

On reaching a mileage of 15,000 km, the drive belt needs to be replaced by a service centre authorised by Brose/BMZ. Please obtain information about your responsible service centre from your bicycle dealer.

2.5 Transport

When transporting a complete e-bike, please note the transport information pertaining to the rechargeable batteries (see 4.6).

2.6 Disposal

Motor, display, rechargeable battery, speed sensor, accessories and packaging should be disposed of in an environmentally-compatible manner. Do not dispose of your e-bike and its components in the household waste system.

Only for EU countries



In compliance with the European Directive 2012/19/EU electrical devices that are no longer serviceable, and in compliance with the European Directive 2006/66/EG faulty or spent rechargeable batteries/batteries, must be collected separately and disposed of in an environmentally-friendly manner.

Please hand in all spent rechargeable batteries and non-functional displays to an authorised bicycle dealer.

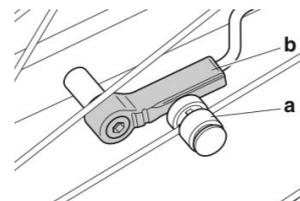
2.7 Technical data

Art. No.: #23084

- Measurements: 213 x 150 x 128 mm
- Weight: 3,400 g
- Nominal voltage: 36 V DC
- Type of protection: IP56
- Torque: 90 Nm
- Max. continuous rated power: 250 W
- Support up to: 25 km/h
- Working temperature range: -10 to 50 °C

2.8 Aligning the sensor

Make sure that the magnet (a) is aligned parallel to the marking on the sensor (b). If the magnet is misaligned, it may cause problems with the engine's support.



3 Display

3.1 Safety instructions

⚠ WARNING

There is a risk of injury if you disregard the safety instructions!

- CAUTION: Risk of injury if the e-bike system is activated unintentionally. Please remove the rechargeable battery before working on the E-Bike (e.g. assembly, maintenance, working on the chain etc.), or transporting or storing it.
- CAUTION: Risk of injury when using the pushing aid without the wheels touching the floor. Only use the pushing aid when pushing the e-bike.
- Please change basic settings **before** starting a journey. By driving unconcentrated you are endangering yourself and other road users.
- Before starting your first journey please familiarize yourself with the functions of the e-bike and the operation of the display.
- Do not be distracted by the display. If you do not focus exclusively on the traffic, you risk being involved in an accident. While driving, check the displayed items, change the assistance level, activate the push assist, and turn the light on or off. For entries in the display, stop and enter the corresponding data.
- Never open the display. It can be destroyed by opening and the warranty claim is void.
- Never use the display as a handle. Lifting the e-bike on the display can damage the display irreparably.
- Carry the manual with you on all journeys. That way you can read up even less frequently needed functions at any time.

3.2 BMZ display

The display and control unit is only intended for use with the BMZ e-bike system. It serves to display driving and status-relevant information and to control the motor.

The illustrations are outlines only, details may vary on your e-bike.

3.2.1 BMZ sportive display

The compact sportive display is display and control unit in one. It can be installed unobtrusively near the handle and is less prone to damage in case of a fall.

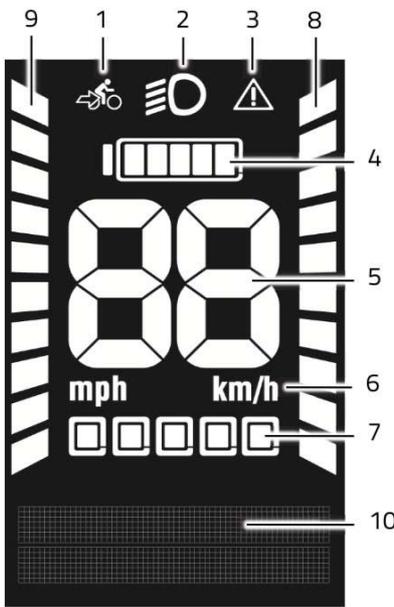
3.2.2 BMZ new-style display

The large new-style display is mounted easy to read in the middle of the handlebars and has additional functions. The system is controlled easily via the control unit near the handle.

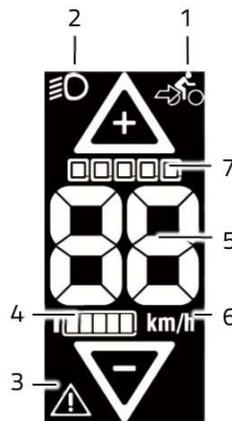


3.2.3 Display units

The two displays have a similar design. The new-style display also has a multifunctional display and a display that shows the ratios of the performance by the rider and that of the motor.



New-Style display



Sportive display

Symbols

- 1 Pushing mode
- 2 Lighting
- 3 Warning
- 4 Charging status
- 5 Speed
- 6 Unit (km/h, mph)
- 7 Support level
- 8 Performance ratio cyclist
- 9 Performance ratio motor
- 10 Multifunctional display

Charging status display

The charging status of the rechargeable battery (4) is shown in five segments on the display. One segment corresponds to about 20% of the rechargeable battery capacity.

During charging (LED flashing)	During riding
0-19%	100-80%
20-39%	79-60%
40-59%	59-40%
60-79%	39-20%
80-99%	19-5%
100%	No display = emergency mode/motor off

NOTE

If the charging status is < 20 %, the charging status display will begin to flash. If the charging status is < 5 %, the charging status display will disappear. In this state the motor support is switched off to ensure that the lights can be used for another two hours.

Support levels

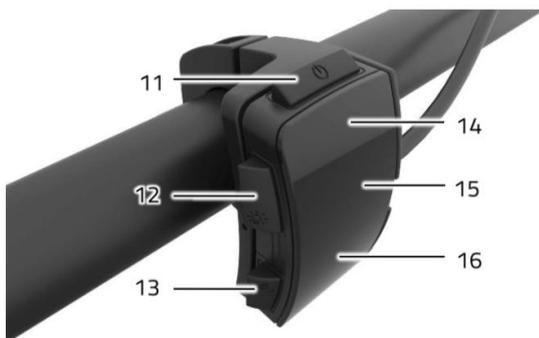
	Off – no support
	Level 1 – 40% support
	Level 2 – 80% support
	Level 3 – 160% support
	Level 4 – 320% support

Multifunctional display

At the bottom of the new-style display is the multifunction display. Touch the menu touch field on the control unit (see 3.2.4) to switch through the menu and show the different features:

Feature	Unit
Time of day	hh:mm (24h or 12h am/pm)
Trip distance	km mi
Trip calories	Kcal
Trip time	hh:mm
Avg. speed	km mi
Max. speed	km/h mph
Total distance	km mi
Total time	hh:mm

3.2.4 Control elements

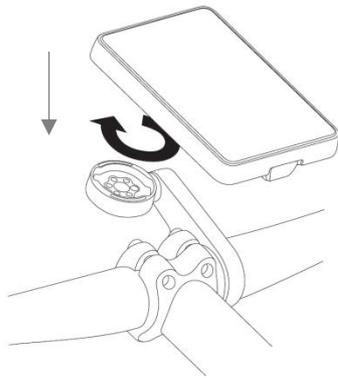


- 11 On/off (button)
- 12 Light (button)
- 13 Pushing aid (button)
- 14 Up (rocker)
- 15 Menu (touch field)
- 16 Down (rocker)

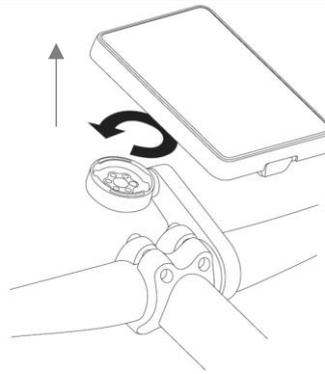
3.2.5 Operation and settings

Mounting the new-style display

The bracket of the new-style display is pre-mounted in the middle of the handlebars. The display is packed separately when transporting the e-bike to protect it from damage. The e-bike is only functional when the display is mounted.



Mounting the new-style display



Demounting the new-style display

1. Tilt the display 45° to the left, put it onto the holder and turn it straight to the right
2. Connect the display to the engine with the intermediate cable

To remove the new-style display, disconnect the intermediate cable, rotate the display 45° to the left and lift it upwards.

Switching the e-bike system on and off

To turn on the e-bike, press the power on/off button on the display/control unit or the LED button on the battery.

To turn off the e-bike completely, press the power on/off button for >3 sec. or press the LED button on the battery for >3 sec.

Support levels

Use the rocker switches (buttons 14 and 16) to adjust the support level of your e-bike. There are four levels of support available. Press button 14 to switch to the next higher level of support. Press button 16 to decrease the support level. You can ride the e-bike at any time without support like a normal bike, either by switching off the e-bike system completely or by setting the support level to **Off**. The same applies when the battery is empty. The Brose Drive S decouples completely, so that no pedalling resistance is created by the engine.

The bright segments on the display indicate the active level of support (see chapter 3.2.3).

Pushing aid

With the pushing aid, the e-bike can be moved comfortably at a speed of up to 6 km/h without pedalling. You can use the pushing aid when pushing the e-bike or for further assistance when hill-starting. When pushing the e-bike, move aside of the e-bike. When using the pushing aid as a starting aid, sit on the bike.

To activate the pushing aid, press and hold button 13 (see 3.2.4). After >3 seconds, the e-bike automatically starts moving – for as long as the button is held down. The pushing mode icon will appear on the display.

⚠ WARNING

- CAUTION: The push aid moves the e-bike as well as the pedals!
- CAUTION: Risk of injury when using the pushing aid without wheels touching the floor.
- Grasp the handlebars and be ready for braking.
- When sitting on the bike, do not put pressure on the pedals. In combination with the pushing aid this could greatly accelerate the speed of the e-bike. The second pedal turns as well and may hurt you when sitting on the e-bike!
- Do not use the pushing aid for slow driving.

Light

Briefly press button 12 (see 3.2.4) to activate the display illumination or, depending on the equipment of your e-bike, the lights of your e-bike. The light symbol will appear on the display.

Standby Mode

When the e-bike is not moved, the display unit and motor switch into *standby mode*. This can also be activated manually. If you quickly want to switch off your e-bike only for a short time, simply press the on/off button on the display/control unit to switch to standby mode. The battery remains in *active mode* for 2 hours. As soon as you move your e-bike again, the display and engine are reactivated and the e-bike system is available again. After two hours in active mode the battery automatically switches into *deep sleep mode* (see 4.3.3).

Sportive display settings

The sportive display can show the speed in kilometres per hour or miles per hour. To switch between metric and imperial:

1. Press and hold lighting button >3 sec.
2. Switch unit with the rocker (up/down)
3. To confirm press and hold lighting button again >3 sec.

New-style display settings

The following settings can be made on the new-style display:

Feature	Value
Reset Trip	Resets trip time, burnt calories, distance and avg. speed to zero
Reset All	Resets every value incl. total distance and total time to zero
Light	Auto/Always On/Manual
Date	DD/MM/YY
Time Format	24/12
Time	hh/mm
Language	German/English
Metric/imperial	km/mi

Instructions

1. Press and hold the lighting button on the control unit for >3 sec.
2. Tap the menu touch field in the middle of the control unit until the desired feature is displayed
3. Set values with the rocker (up/down)
4. To confirm tap menu touch field

NOTE

After the last feature, tap the touch field menu again to exit the settings menu. To exit the settings menu immediately, briefly press the lighting button.

3.2.6 Technical data

Art. No.: #27937

- Measurements:
 - New-style display: 67 x 100 x 11 mm
 - Display area: 47 x 72 mm
 - Sportive display: 27 x 47 x 16 mm
- Weight: New-style display 67 g
- Nominal voltage: 36 V DC

- Type of protection: IP65
- Working temperature range: -10 to 60 °C
- Storing temperature range: -20 to 85 °C
- USB charging voltage: 5 V DC
- USB charging current.: 500 mA

3.3 Marquardt Comfort display

The compact Marquardt Comfort display is display and control unit in one. It is mounted near the handle on the left or right side of the handlebars and serves to switch the e-bike on and off, to display driving and status-relevant information as well as to control the motor.



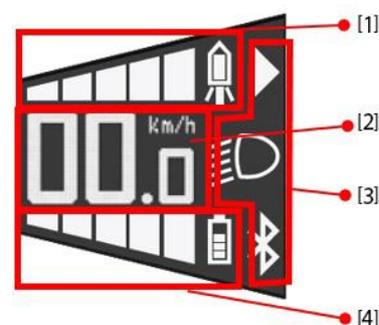
The illustrations are outlines only, details may vary on your e-bike.

3.3.1 Display units

The Marquardt Comfort display offers different information on different menu pages. Switch between pages by moving the joystick sideways. Some pages offer additional subpages that can be accessed by vertical movements of the joystick.

The main page displays the following information:

1. Active level of support
2. Speed
3. Activity status of pushing aid, lighting and Bluetooth
4. Battery level



The other pages are designed according to the following pattern:

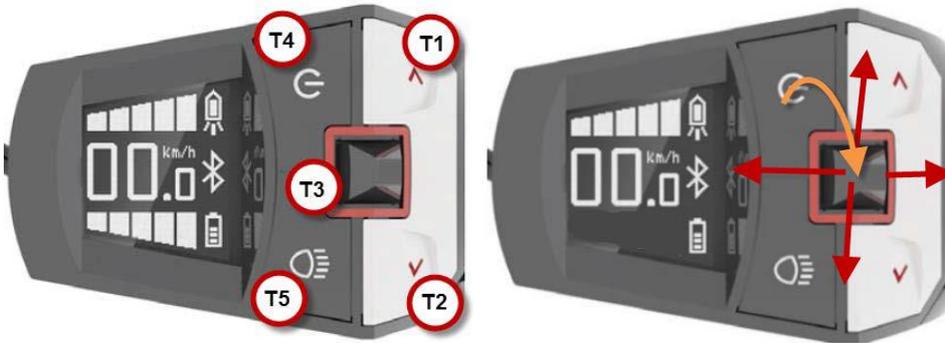
1. Page symbol
2. Horizontal navigation
3. Page content
4. Vertical navigation: indicates subpages



Menu page	Information
Cyclist power (W)	Current cyclist-supplied power for moving the e-bike in watts
Motor power (%)	Current motor-supplied power for moving the e-bike as a percentage of the maximum power
Remaining range (km)	Remaining range of the e-bike with motor support and under constant driving conditions
Trip distance (km)	Distance travelled since the last reset of the value
Trip distance / Ø speed (km/h)	Average speed of the current trip
Trip distance / Max. speed (km/h)	Highest speed of the current trip
Trip distance / RESET	Sets distance, average speed and maximum speed to 0
Total Distance (km)	Total distance covered by the e-bike

Total Distance / Max. speed (km/h)	Highest speed on the total distance covered by the e-bike
Bluetooth	Displays options for the Bluetooth connection. OFF: Bluetooth is switched off Smartphone: connection to a mobile phone Chest strap: connection to a chest strap

3.3.2 Control elements



Button	Function
T1	Increase support level. Hold >3 sec: Switch on pushing aid until button is no longer held.
T2	Reduce support level.
T3	Joystick:
↑	One page up. Change to edit mode. In edit mode, one entry higher.
←	Switch to the next page to the left. In edit mode, exit the mode and confirm the value.
□	Edit the highlighted value in edit mode.
→	Switch to the next page to the right. In edit mode, exit the mode and confirm the value.
↓	One page down. Change to edit mode. In edit mode one entry lower.
T4	Switch Comfort control unit on and off.
T5	Short press: turn on the light. Long press: turn off the light. In automatic mode: Light is switched on or off depending on ambient light. Switching on or off can always be done manually with this button.

3.3.3 Operation and settings

Switching the e-bike system on and off

To turn on the e-bike, briefly press button T4 on the display/control unit or the LED button on the battery. The display will briefly show a starting page and then switches to the main page.

To turn off the e-bike completely, press button T4 for >3 sec. or press the LED button on the battery for >3 sec. The display will turn off.

Support levels

Use buttons T1 and T2 to adjust the support level of your e-bike. There are four levels of support available. Press button T1 to switch to the next higher level of support. Press button T2 to decrease

the support level. You can ride the e-bike at any time without support like a normal bike, either by switching off the e-bike system completely or by setting the support level to **Off**. The same applies when the battery is empty. The Brose Drive S decouples completely, so that no pedalling resistance is created by the engine.

The bright segments on the display indicate the active level of support (see chapter 3.3.1).

Pushing aid

With the pushing aid, the e-bike can be moved comfortably at a speed of up to 6 km/h without pedalling. You can use the pushing aid when pushing the e-bike or for further assistance when hill-starting. When pushing the e-bike, move aside of the e-bike. When using the pushing aid as a starting aid, sit on the bike.

To activate the pushing aid, press and hold button T1 (see 3.3.2). After >3 seconds, the e-bike automatically starts moving – for as long as the button is held down. The triangle symbol will appear on the main page of the display to indicate the active pushing mode.

⚠ WARNING

- CAUTION: The push aid moves the e-bike as well as the pedals!
- CAUTION: Risk of injury when using the pushing aid without wheels touching the floor.
- Grasp the handlebars and be ready for braking.
- When sitting on the bike, do not put pressure on the pedals. In combination with the pushing aid this could greatly accelerate the speed of the e-bike. The second pedal turns as well and may hurt you when sitting on the e-bike!
- Do not use the pushing aid for slow driving.

Light

By switching on the e-bike system, the driving light built in your e-bike (depending on model and equipment) is activated generally.

To switch on the [driving light](#), briefly press button T5. To switch off the driving light, press button T5 >2 sec.

When the driving light is switched on, depending on the equipment of your e-bike, a [high beam](#) can be switched on or off by briefly pressing the T5 button again.

The current status of the driving lights is shown on the main page with the following symbols:

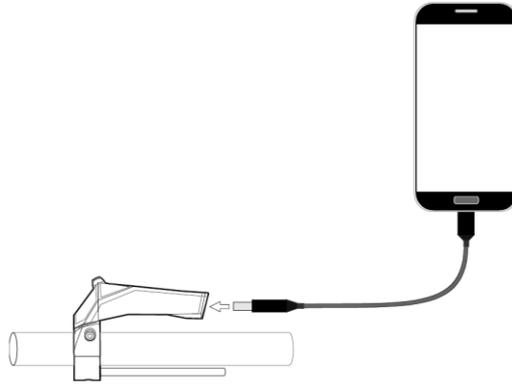
No symbol	Lights off
	Driving lights on
	High beam on

USB port

The Marquardt Comfort display comes with a micro USB port, which sits in the top of the device above the handlebar and is protected with a rubber cap against dirt and moisture.

Your smartphone can be charged by the USB socket. Please only use USB cables that are suggested by the smartphone manufacturer and that can be connected with a USB Micro A plug into the operating unit.

For bicycle dealers the USB port helps connecting the service equipment (plug USB Micro B).



For damage to the mobile phone caused by the connection with the Marquardt Comfort display no liability will be assumed!

To connect a USB device, open the protection cover of the USB port and connect the device directly or via a suitable USB cable. The new connection is displayed on the connected device.

To disconnect, please observe the instructions for disconnecting a USB connection in the operating instructions of the connected device and then disconnect the cable from the USB port of the display. Please make sure to close the protection cap again after use.

NOTE

The display is only protected from water and dirt when the protection cover is closed.

Bluetooth connection

The Marquardt Comfort display can exchange data with a smartphone or a chest strap via Bluetooth. To do this, activate Bluetooth in the Bluetooth menu page of the display.

Activate Bluetooth connection

1. Select the Bluetooth page in the menu of the display.
2. Select the device type you want to connect (smartphone or chest strap).
3. If an option is activated, switch to another page.
4. Now connect the device to the display. It may take a while to connect. Follow the instructions on your smartphone or on the chest strap.
5. The display will exchange data with the device.

Disable Bluetooth connection

1. Select the Bluetooth page in the menu of the display.
2. Activate the option "Off".
3. The display does not send any signals, the Bluetooth connection is disabled.

3.3.4 Technical data

- Measurements (L x W x H): 72,8 x 50,2 x 44,6 mm
- Type of protection: IP65
- Working temperature range: -10 to 65 °C
- Storage temperature range: -20 to 85 °C
- ESD model: Human Body Model (HBM)
- USB port: Micro USB Standard 2.0 Full Speed
- USB charging: USB Battery Charging Standard BC1.2 Max. 1,0A
- CAN Interface ISO 11898-5: High-speed CAN

3.3.5 Trouble shooting

The Marquardt Comfort display shows error codes for the entire e-bike system. The error codes represent system-detected errors. The following table shows the meaning of the error codes. Please note the recommended solution to the error codes. Contact a certified bicycle dealer if the recommended solutions are not solving the issue.

Error code	Description	Recommended solution
10	The battery voltage is too low	Charge the battery with the charger.
11	The battery voltage is too high	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
12	The battery is almost/completely discharged	Charge the battery with the charger.
20	Electrical measurements are faulty	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
21	Thermal sensor defective	
24	The internal voltage is outside the working range	Charge the battery with the charger.
25	Error in the motor current measurement	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
26	A software reset has been performed	
40/41	Detection of overcurrent in the motor	Reduce the load on the motor by less pedalling or reducing the assistance level.
42	Error in the motor rotation	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
43	Short circuit in the engine	
44	Motor overheated	Reduce the load on the motor by less pedalling or reducing the assistance level.
45	The software has corrected an error while turning the motor	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
46	No motor movement detected, although a current >2 A was measured	
60	Interruption of the data exchange on the CAN-BUS	Check the cables and connectors of all components of the e-bike system.
70	Force on the pedal is not in the valid range	
71	Rotation of the pedals is not recognized	
72	Force on the pedal is not recognized	
73	Connection to the pedal force sensor is disturbed	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
74	Errors were detected in the data	
80	Faulty motor parameter	
81	Speed signal is not detected	Make sure that the spoke magnet is positioned correctly against the speed sensor.
82	The program was manipulated	Switch off the system completely via the control unit key T4 and then on again. If the problem persists, contact your e-bike dealer.
83	Error in the program flow	
84	Faulty motor parameter	

3.4 Disposal

Motor, display, rechargeable battery, speed sensor, accessories and packaging should be disposed of in an environmentally-compatible manner. Do not dispose of your e-bike and its components in the household waste system.



Only for EU countries

In compliance with the European Directive 2012/19/EU electrical devices that are no longer serviceable, and in compliance with the European Directive 2006/66/EG faulty

or spent rechargeable batteries/batteries, must be collected separately and disposed of in an environmentally-friendly manner.



Old machines, replacement parts and packaging are made of recyclable materials. The owner is obliged to dispose of them properly and ecologically in accordance with the law. All plastic injection-moulded parts are provided with a recycling symbol.

RoHS Directive (2011/65 / EU)

4 Battery

4.1 Safety instructions

WARNING

There is a risk of danger, if the safety instructions are not observed!

Non-observance of safety information and instructions can lead to an electrical shock, fire, serious injuries and/or death.

All lithium-ion batteries carry the risk of explosion and fire. Injuries or damage is also possible as a result of dangerous reactions of chemical substances that leak from the rechargeable battery resulting from non-observance of the safety instructions.

Please observe all safety information and instructions both in these and in all other instructions included with the e-bike.

- CAUTION: Risk of injury if the e-bike system is activated unintentionally. Before working on the e-bike (e.g. assembly, maintenance, working on the chain etc.), or transporting or storing it, please remove the rechargeable battery from the e-bike.
- Use battery and equipment only if in proper condition. Never use a damaged or broken battery.
- Only use rechargeable batteries approved for your e-bike. The warranty and liability will become invalid if other rechargeable batteries are used.
- Use this rechargeable battery only in e-bikes with BMZ systems. This is the only way to protect the rechargeable battery from dangerous overloading.
- Charge battery before use. Only use the supplied charger delivered with your e-bike.
- Always keep battery and its contacts dry and clean. Remove dirt with a dry clean cloth.
- Do not use any solvents (i. e. dilution, alcohol, oil, anti-corrosives), detergents, or running water to clean the battery.
- Persons (including children) with reduced physical, sensory or mental abilities or lack of experience and knowledge may not use the battery, unless they are supervised and instructed by a person responsible for their safety.
- Do not expose battery to strong mechanical impacts. Risk of damage to the battery.
- Do not allow children to play with the battery.
- Risk of short circuits! Do not open or dismantle the battery.
- Do not expose the battery to drastic temperature changes.
- Risk of explosion! Protect battery from temperatures above 140°F/60°C, direct sunlight, and fire. Excessive heat may result in battery leakage and damage to the casing.
- Do not immerse the battery in any liquid. Do not clean with high-pressure cleaner.
- Do not use the battery if contacts are damaged. Do not use with damaged power cables.

4.1.1 First-aid measures

Medical aid will be required in case of symptoms caused by combustion gases or leakage.

AFTER INHALATION

In case of damage or improper use chemical gases may leak. Leave area immediately and breath fresh air. Seek medical advice in case of any symptoms. Gases may cause respiratory irritation.

AFTER SKIN CONTACT

Remove solid parts immediately. Flush affected areas with plenty of water (at least for 15 min). Carefully pad dry affected areas – do not rub. Remove contaminated clothes immediately. Seek for medical attention if skin shows redness or irritation.

AFTER EYE CONTACT

Flush eye gently with plenty of water (at least for 15 min). Shield unaffected eye. Seek medical assistance immediately.

AFTER INGESTION

Drink plenty of milk or water and induce vomiting. Seek medical attention immediately.

4.1.2 Firefighting measures

⚠ WARNING

Inhaling smoke can cause poisoning. When facing the fire, position yourself with wind in your back. If possible, use breathing protection

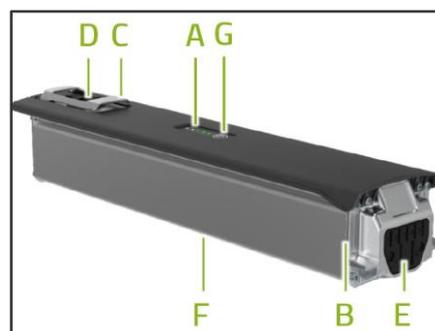
1. If possible, remove other batteries carefully.
2. Evacuate all persons from immediate area of fire.
3. To fight the fire use plenty of water or a class D fire extinguisher.
4. Call the fire department if fire cannot be extinguished or controlled.

4.2 Product description

Your e-bike contains a BMZ UR V8 10S (art.-no. 31600-[...]) high-performance removable rechargeable battery with 625 Wh.

Overview

- | | |
|---|-----------------------|
| A | Charge status display |
| B | Warranty seal |
| C | Dismounting latch |
| D | Charging socket |
| E | Discharging socket |
| F | Product label |
| G | Power button |



Intended use

The battery supplies the e-bike's drive system with power. It may only be used with compatible, designated drive systems and chargers. Any other use is not in compliance with the intended application. Warranty will cease in case of non-compliant use.

Safety features

An integrated safety relay protects the battery from overcharging, deep discharging, overcurrent, short circuit, and operation outside the safe temperature range.

4.2.1 Mounting

Inserting the battery

CAUTION: Battery may drop out of the frame. Latch may release itself due to heavy motion.

1. Insert turned off battery with display facing down.
2. Push battery in until it locks in place.
3. Secure battery by locking it with the key. Remove key and store it safely.



Removing the battery

CAUTION: Battery may drop when it is released from the frame. Always use both hands to remove battery.

1. Switch off power.
2. Open lock.
3. Pull latch to release battery.



4.2.2 LED display and description of symbols

LED-display and power button



Description of symbols

Symbol	Meaning
●	LED on
○	LED off
*	LED flashing

States of charge

LED 1, 2, 3, 4, 5	Charge status
●●●●●	100...80%
●●●●○	79...60%
●●●○○	59...40%
●●○○○	39...20%
●○○○○	19...10%
*	9...0% → Recharge within 2 days to avoid permanent damage to the battery

Compatible chargers

The following chargers are compatible with the BMZ battery model UR V8 10S:

- 24555-14 4,0 A
- 28555-14 4,5 A

4.2.3 Labeling and symbols

Label



Symbols

Symbol	Meaning	Symbol	Meaning
	Polarity and pin configuration of charging and discharging sockets		Danger of explosion and fire, caused by short circuit, overheating, or other electrical/mechanical abuse
	Lithium-ion battery symbol (contains recyclable materials)		Do not expose to open flame, fire, open ignition source. Danger of explosion and fire.
	Conformity with relevant European directives		Do not immerse in liquids
	Warning of hot surfaces		Follow operating instructions
	General warning symbol		Do not dispose in domestic or industrial waste

4.2.4 Technical data

	Model UR V8 10S (art.-no. 31600-[...])
Nominal capacity	17,0 Ah
Energy	625,0 Wh
Max. permanent discharge current	25 A
Max. permanent charge current	5 A
Voltage	36 V
Max. charging voltage	42,0 V
Weight	4,1 kg
Dimensions (W x H x L)	inch: 3.78 x 3.31 x 17.72 mm: 96 x 84 x 450

4.3 Operation

4.3.1 Safety advice

Only use a battery that has been approved for use in your e-bike. Check if the battery and housing are intact before use.

Turn off the battery before inserting or removing it. Check if the battery is properly locked in place and securely attached before each ride. Chapter 4.1 and 4.6 contain detailed safety instructions on the use and transportation of the battery.

4.3.2 Switching the battery on and off

Shortly press the power button to switch on the battery. LEDs will sequentially light up and go out again.

To switch off the battery keep power button pressed until all LEDs have turned off. Battery will turn off automatically if not in use.

The battery is partially charged when delivered (approx. 30-50 %). To guarantee the full performance of the battery, charge it completely before it is used for the first time.

4.3.3 Operating modes

Active Mode

Once it is switched on, the battery is in Active Mode. If no further action is taken (operation or moving the e-bike), it remains in Active Mode for two hours. The Active Mode is activated by pressing the LED button (24), by charging the battery or by inserting the battery into the e-bike.

Deep Sleep Mode

To minimise the system's internal consumption, the rechargeable battery automatically switches to Deep Sleep Mode after 2 hours in Active Mode, if there is no activity and if the display unit is switched off. The Deep Sleep Mode is also activated if the LED button (24) or the on/off button of the display unit is pressed for >3 sec. or if the battery is removed from e-bike for more than 30 seconds.

4.3.4 Charging the battery

Only use the charger that was supplied with your e-bike. The battery can be charged inside or outside the frame. The charging socket is located at the latch at the top of the battery and is protected with a rubber cap against dirt and moisture. To charge, open the protection cap and connect the battery to the power supply through the charging cable. During the charging process, you can read the current charge status on the display.

Blinking LEDs change to solid green light as the charging process progresses:

LED 1, 2, 3, 4, 5	Charge status
*○○○○	0...19%
●*○○○	20...39%
●●*○○	40...59%
●●●*○	60...79%
●●●●*	80...99%
●●●●●	100%



NOTE

- *Interrupting the charging process does not damage the rechargeable battery.*
- *If the rechargeable battery cannot be charged or is damaged stop using it and contact a certified e-bike dealer or BMZ directly.*
- *The rechargeable battery reaches its maximum service life, if it is charged in ambient temperatures between 10 and 30°C.*

4.3.5 Trouble shooting

Problem	Possible solution
All LEDs blinking and error code on display	Battery is non-operational. Please contact your vendor or the BMZ Service Centre.
One LED is blinking	Charge battery.
Latch is stuck	Apply small amount of bike chain lubricant spray.

Defective cover	Contact your vendor or BMZ Service Centre
Lid of charging socket is torn off	Do not use the battery. Socket may be loose.
Battery is not working	<ul style="list-style-type: none"> - Press power button to switch battery on - Battery is too cold. Allow it to warm up slowly in warmer environment. - Battery is too warm. Allow it to cool down slowly. - Battery deeply discharged due to inadequate storage. Contact vendor.
Limited range	<ul style="list-style-type: none"> - Low temperatures. Decreased battery range during winter is normal. - Loss of capacity due to inadequate storage or natural aging: Replace battery.

Contact your vendor if there is a problem that is not listed.

4.4 Cleaning

Always keep battery and its contacts dry and clean and only place it on clean surfaces. Remove dirt with a dry clean cloth. Do not use any solvents (i.e. dilution, alcohol, oil, anti-corrosives), detergents, or running water to clean battery. Do not immerse battery in any liquid. Do not clean with high-pressure cleaner. Dirty and corroded contacts can be cleaned and protected from further corrosion with a special e-bike cleaner (i.e. TUNAP SPORTS e-bike cleaner). If battery is not operational anymore stop using it and contact a certified your vendor or BMZ.

4.5 Storage

Safety provisions

- Remove battery from e-bike when it is not in use.
- Do not store battery near hot or inflammable objects. Danger of explosion.
- Temperatures above 140°F (60°C) may lead to leaking and damage to battery's casing. Avoid contact with leaked substances.
- Do not store battery near heaters. Protect battery from direct sunlight.
- Store battery in a dry place away from flames and food.
- Keep small metallic objects away from battery. They may accidentally bridge contacts.

Recommendations for best life span

- Store battery with a charge level of 50%. Check charge level every three months (if not in use) and recharge to 50% if necessary.
- Store battery protected from freezing temperatures.
- Avoid drastic temperature changes.
- Recommended storage conditions:
 1. Temperature: 22–26°C
 2. Air humidity: 0–80%
 3. Charge level: app. 50%

As the rechargeable battery gets older, its capacity will decrease, even if it is well kept. If the operating time is much shorter after charging, this indicates that the rechargeable battery is spent. It should be replaced.

4.6 Transportation

Dispatch

The battery is categorized as a dangerous good and may only be packaged and dispatched by especially trained personnel. Contact your vendor for more information.

Transport on public roads

Private users may transport their battery on public roads without any stipulations. Commercial users or third parties transporting lithium-ion batteries need to adhere to respective dangerous good regulations.

4.7 Disposal



Do not dispose your old battery with your household waste. In EU countries it is mandatory to return batteries. Returning old batteries is free of charge. To avoid a short circuit, fully discharge the battery and cover its poles with adhesive tape.

If batteries are not disposed of properly, they pose a risk of fire, health and environmental hazards.

Drop-off points:

- Manufacturer
- E-bike vendor
- Local recycling centres

5 Charger

5.1 Safety instructions

WARNING

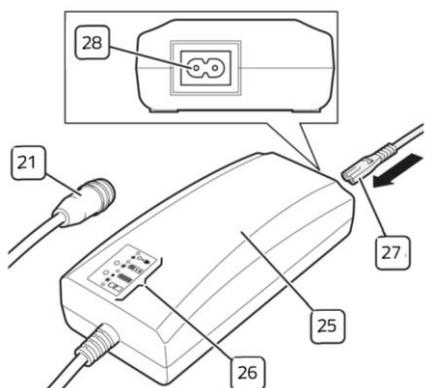
There is a risk of danger, if the safety instructions are not observed!

Non-observance of safety information and instructions can lead to an electrical shock, fire and/or serious injuries.

Please observe all safety information and instructions both in these and in all other instructions included with the e-bike.

- Risk of an electrical shock if penetrated by water: the charger should never be exposed to excessive moisture (e.g. rain, snow etc.).
- Risk of fire and explosion if the wrong batteries are charged. Only use the charger supplied for the rechargeable battery in your BMZ E-Bike system. The rechargeable battery voltage and charging voltage of the charger must match.
- Risk of electrical shock caused by dirt: always keep the charger clean.
- There is a higher risk of electrical shock from damaged chargers, cables and connectors: always check the charger, cable and connector before use. If you establish any damage, do not use the charger under any circumstances. Do not open the charger and only allow it to be repaired by qualified specialists and only using original spare parts.
- Risk of fire if charger overheats during charging: do not place the charger on a flammable surface (e.g. paper, textiles etc.) or operate it in a flammable environment.
- Risk of misuse and injuries: Children and persons that, because of their physical, sensory or intellectual capabilities, or because of their lack of experience or knowledge, are incapable of using the charger safely, must not use this equipment without the supervision or guidance of a responsible person.
- Never leave the battery and charger unattended during charging.
- Please keep these instructions for future reference.

5.2 Features of the charger



- 21 Charging connector
- 25 Charger
- 26 Status LED
- 27 Mains supply cable
- 28 Mains connection

The illustrations are outlines only, details may vary on your e-bike.

5.3 Operation

⚠ WARNING

Mind mains voltage!

The voltage of the power source must match the information on the type label of the charger.

1. Switch off the battery
2. Connect charger to the battery
3. Connect charger to the mains by plugging it into a power socket
 - The LED status indicator of the charger should now be activated

NOTE

In particular, avoid soiling on the charging connections and the contacts.

Be careful, if you touch the charger during charging. It may become very hot, especially when ambient temperatures are high.

Charging process

Charging begins automatically as soon as the charger is connected to the rechargeable battery and the mains supply.

Once the rechargeable battery is completely charged, the LEDs will go out. The charging process is completed.

1. Disconnect the charger from the mains supply.
2. Disconnect the rechargeable battery from the charger. The battery switches itself off.

If, after charging, the rechargeable battery is not removed from the charger and the charger is still connected to the mains supply, it will switch on again after a few hours, check the charging status of the rechargeable battery and may start charging again if necessary.

NOTE

Never leave the battery and charger unattended during charging.

LED status display

Display	Status
Green LED flashes	Standby
Red LED on	Charging process
Green LED on	Battery full / trickle charging
Green and red LED flashing	Error

5.4 Maintenance and cleaning

If the charger fails, please contact an authorised dealer.

Use a soft dry cloth to clean the charger. Do not use water or other cleaning fluids!

5.5 Technical data

	4-A charger
Dimensions (mm)	206 x 94 x 61
Weight	770 g
Final charging voltage	42 V DC
Rated output current	4 A
Temperature range operation	0 – 45°C
Temperature range storage	-25 – 70°C

6 Changing the wheels

With all NOX e-bikes, the wheels can be changed from 29" to 27.5" and vice versa via flip chip.

NOTE

Maximum tyre width with 27.5": 2.8"

Maximum tyre width with 29": 2.3"

Components of the changing set:

1. 2x derailleur hanger
2. 2x flip chip
3. 2x cylinder head bolt
4. 2x countersunk screw
5. 1x threaded sleeve
6. 1x brake adapter

The two flip chips and the derailleur hangers are marked with 450 mm for the short chainstay or the 27.5" wheel and with 465 mm for the long chainstay or the 29" wheel or particularly large/wide 27.5" wheels that do not fit in the short chainstay.

The brake adapter is also marked with 450 mm. If this side is visible the brake is adjusted to fit the 27.5" wheel; if the unmarked side is visible the brake is aligned for the 29" wheel.

Required parts for mounting a 27.5" wheel:

- Flip chip 450 mm
- Derailleur hanger 450 mm
- Brake adapter with „450“ side up

Required tools for changing wheels:

- Allen key 2.5 mm for flip chip
- Allen key 5 mm for brake adapter
- Torx screwdriver 25 for Magura brakes



NOTE

If the wheel is already mounted, the second derailleur hanger is in the NOX accessory bag that you received with the bike.



Position derailleur hanger for 27.5" wheel



Position derailleur hanger for 29" wheel



Position flip chip for 27.5" wheel



Position flip chip for 29" wheel

Adjust brake with adapter: 450 mm visible for the 27.5" wheel and no label visible for the 29" wheel. Readjust brake after conversion if necessary.



Position brake adapter for 27.5" wheel



Position brake adapter for 29" wheel

7 Brakes

NOTE

Excessive pressure on the brake handles can block the wheels during braking! This could cause accidents.

Please mind all user and safety instructions given by the manufacturer!

Detailed user instructions to MAGURA brakes can be found online under <https://www.magura.com/de/components/techcenter/> as well as detailed video tutorials under <https://www.youtube.com/user/MAGURAPassionPeople>

8 Suspension fork and shock absorber

NOTE

Both the suspension fork and shock absorber (strut) must be adjusted to the rider's weight with the correct air pressure before first use. Only use a suitable shock pump for this.

Please mind all user and safety instructions given by the manufacturer!

Detailed user instructions to Rock Shox suspension elements can be found online under <https://www.sram.com/de/service/include-archived/rockshox/all> as well as detailed video tutorials under <https://www.youtube.com/user/SRAMtech/videos>

9 Shifting system

NOTE

*Make sure to shift gears separately, do not shift several gears in one go. If possible, always shift into lower gears **before** going uphill.*

Please mind all user and safety instructions given by the manufacturer!

Detailed user instructions to SRAM shifting systems can be found online under <https://www.sram.com/de/service/include-archived/sram/258> as well as detailed video tutorials under <https://www.youtube.com/user/SRAMtech/videos>

10 Nox Cycles declaration of EU conformity

The manufacturer:

Nox Cycles Austria GmbH
Rohrerstraße 51
6280 Zell am Ziller
Austria

hereby confirms for the following products of the Nox Hybrid series:

- Nox Hybrid 7.1 Enduro with BMZ/Brose Electric Drive System
- Nox Hybrid 5.9 All-Mountain with BMZ/Brose Electric Drive System
- Nox Hybrid XCTrail with BMZ/Brose Electric Drive System

from the year of manufacture:

- 2018 - 2019

the conformity with all applied regulations to the Directive:

- Machinery (2006/42/EU) of 17 May 2006

These products are equally compliant to all regulations of the Directive:

- Electromagnetic compatibility (2014/30/EU) of 26 February 2014

The following harmonized standards have been applied to the above-mentioned products:

- DIN EN 15194: Cycles / Electrically power assisted cycles / EPAC Bicycles
- DIN EN 4210-2: 2015-12: Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles

This declaration refers only to the condition in which the above-mentioned products were placed on the market. This declaration is invalid if modifications or alterations have been made to the products.

Place of issue: Zell am Ziller, Tirol, Austria
Date of issue: September 1st 2018
Function of the signee in the company: Managing Director
Name of the signee: Carsten Sommer

Signature:



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