

 **BLAUPUNKT**

**FRIDEL**® (Mod. 2024)

**FRIDA**® (Mod. 2024)



*Enjoy it.*

Owners manual

## INTRODUCTION

Congratulations on the purchase of your new Blaupunkt folding e-bike. We want you to enjoy your folding e-bike for a long time, **so please read this manual carefully.**

If, contrary to expectations, you have problems with your folding e-bike, please check the operating instructions to see if you can solve the problem. Please note: This manual is not a detailed guide for service, maintenance and repairs. Repairs may only be carried out by a specialist/bicycle dealer to ensure the safety

of your folding e-bike. Furthermore, some functions/options depend on the model you have purchased and may not apply. Your dealer and Blaupunkt Service will be happy to help you.

**It is recommended that you keep the complete packaging of the folding e-bike, as this will be useful if you need to send it for repair or service work or if you wish to sell it.**

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## 2. IMPORTANT SAFETY INSTRUCTIONS

**The folding e-bike is delivered pre-assembled and not ready to ride.** It is essential that all components and screws are checked for tightness and tightened if necessary before first start-up. Check the setting and function of the gears, brakes and all other mechanical parts. If possible, this work should be carried out by a certified specialist bicycle workshop.

- Only use the folding e-bike as described in the operating instructions. Any other use will invalidate the guarantee.
- The folding e-bike is not intended for commercial use!
- Persons with limited physical, sensory or mental abilities or a lack of experience and/or knowledge should only use the folding e-bike under the appropriate instruction or supervision of a person responsible for their safety.
- Children must be supervised to ensure that they do not play with the folding e-bike. Children under the age of 14 should not use the folding e-bike!
- Check the folding e-bike for completeness and function before each use.
- Do not use the folding e-bike if there is any doubt as to its proper and safe functioning or if it is visibly damaged.
- Protect the folding e-bike from moisture and only store it in places that are protected from rain and adverse weather conditions. If the folding e-bike gets wet, dry it carefully after use.
- Observe all regulations of the Road Traffic Regulations (StVO) and the Road Traffic Licensing Regulations (StVZO) in their current version. Technical modifications to the folding e-bike should only be carried out in accordance with these regulations.
- Always adjust your speed to the light conditions, weather, traffic, visibility and your driving ability.
- Please note that unfavourable weather conditions can impair the braking effect.
- Avoid abrupt steering and braking manoeuvres on wet roads.
- Always keep a sufficient distance from vehicles in front.
- Always drive with the lights switched on in restricted light conditions and in the dark. In addition to lighting, eye-catching clothing with reflective surfaces also increases your safety and visibility.
- Damaged or bent components caused by accidents or improper handling should be replaced immediately. If you have any doubts about the operational reliability of the folding e-bike, contact a specialist workshop immediately.
- Repairs, maintenance and adjustment work on the folding e-bike should only be carried out by persons with the necessary knowledge and tools. You should always remove the battery before starting this work.
- When replacing components, only original parts should be used, as they have been specially developed for the folding e-bike and guarantee safe operation. This applies in particular to safety-relevant parts such as the frame, fork, handlebars, saddle, seat post, luggage rack, brake components, lights, pedal cranks, wheels, tyres and inner tubes. The use of third-party parts can lead to damage, the failure of safety-relevant components and the cancellation of the guarantee.
- No child seats or towbars should be attached to the seat post or to full-suspension folding e-bikes, as this can lead to frame damage and even breakage.

- If you are unsure, you should leave all work on the folding e-bike to a specialist workshop.
- Make sure that the tyres of your folding e-bike are sufficiently inflated. Too little air increases the effort required and tyre wear.
- Wear suitable clothing, sturdy shoes and tight-fitting leg wear when travelling. Wearing a suitable safety helmet is recommended.
- Always keep both hands on the handlebars and your feet on the pedals while cycling. Never ride barefoot.
- To familiarise yourself with the cycling characteristics of your new folding e-bike, take your first ride away from road traffic.
- For safety reasons, headphones should not be used to listen to music in traffic, as this can impair your perception of the surrounding noise and delay your reaction to dangerous situations.
- The safest way to secure your folding e-bike against theft is with a chain or steel cable lock. This allows the frame, front and rear wheel to be attached to a fixed object.
- The folding e-bike should only be used by one person. No passengers are allowed.
- The maximum load of the folding e-bike is 110 kg including a maximum load of 20 kg on the luggage rack. Do not overload the folding e-bike, as this can lead to damage and injury.
- Electric bikes generate stronger braking and lateral forces on the bike carrier than conventional bikes. Make sure that your bike carrier is suitable for e-bikes.
- Before setting off, check that all components are properly secured and protected.
- Ask your specialist dealer about suitable bike carriers for your folding e-bike.

### **Residual risks**

The use of the folding e-bike harbours unforeseeable residual risks despite compliance with all safety instructions.

### **Risk of injury**

Accidental damage or fires can cause gases, vapours and liquids to escape from the battery, which can lead to injuries.

### **Fire hazard**

Internal damage can cause the battery to catch fire and set other objects on fire.

### **Risk of damage**

In the event of fire, hydrofluoric acid can escape, which can permanently damage surfaces.

## **2.1 SAFETY INSTRUCTIONS FOR TRANSPORT**

### **Transport by car**

If you transport your folding e-bike on a bike carrier for cars, please observe the following instructions:

- If the road is wet, there is a risk of the electronics being washed out.

### 3. SCOPE OF SUPPLY

Blaupunkt folding e-bike,  
bicycle battery with keys (model-specific, only  
with replaceable battery),

charger, operating instructions,  
mobile phone holder (model-specific),  
accessories

### 4. OVERVIEW & DESCRIPTION OF COMPONENTS



1. Brake lever left
2. Adjustable handlebar stem
3. Rotary shifter
4. Brake lever right
5. Handlebar
6. Headlights
7. Front wheel break
8. Fork
9. Electric motor
10. Pedal crank
11. Stand
12. Rear derailleur (right-hand side of the folding e-bike in the direction of travel)
13. Rear wheel brake
14. Tail light
15. Lock
16. Connection port (concealed, on the left-hand side of the folding e-bike in the direction of travel)
17. Battery
18. Luggage rack
19. Quick-release fastener for seat post
20. Seat post
21. Saddle
22. Spokes
23. Folding mechanism
24. Mudguards
25. Chain
26. Pinion and cassette
27. Tyres and rims
28. Pedals
29. Control unit/bicycle computer

## 5. FOLDING THE FOLDING E-BIKE & REMOVING THE BATTERY

### 5.1 HANDLEBAR (EASY-UP STEM)



#### Turn the handlebars 90 degrees:

1. Open the quick-release lever.
2. Pull the handlebar all the way up.
3. Turn the handlebars 90 degrees to the right.
4. Push down again as far as it will go.
5. Close the quick-release lever.

#### Adjust handlebar height only:

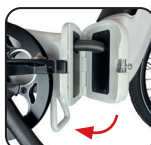
1. Open the quick-release lever.
2. Pull the handlebars up or push them down to the desired height.
3. Close the quick-release lever.

*Before cycling, check that the stem clamp is tight and, if necessary, correct it by tightening the quick-release nut.*

### 5.2 PEDALS, FRAME, SADDLE



**Fold the pedals:** Press the pedals towards the crank and then fold them 90 degrees.



**Frame locking:** Open the folding lever (23) and swivel the front part of the bike backwards until the practical magnetic holder secures both parts. (Swivelling is easiest when the bike is standing on the stand and some pressure is applied to the rear part of the bike.)



**Saddle:** Open the quick release on the seat post (19) and pull the seat to the desired height. Close the quick-release lever.



### 5.3 BATTERY REMOVAL

**1. Open the lock:** Insert the supplied key into the lock and turn it anti-clockwise to open the lock.

**2. Battery release:** After opening the lock, the battery pops about 2 cm out of the socket at the top.

**3. Removal:** Carefully remove the battery from the socket by pulling it upwards. Make sure that you remove the battery safely and securely and store it in a safe place when it is not in use.

### 5.4 INSERTING BATTERY

**1. Position the underside:** First insert the underside of the battery into the socket provided on the frame.

**2. Upper positioning and latching:** Press the battery into the frame from above, making sure that it is correctly aligned. Press the battery down until it clicks into place and sits securely in the frame.

**3. Close:** Turn the key clockwise to secure and lock the battery. Ensure that the battery is now firmly and stably enclosed in the frame.

With these steps, the battery should be securely placed in the frame and ready for use.

## 6. BATTERY, CHARGER AND CHARGING FUNCTION

The battery must be charged before first use. Only use the original charger specified by Blaupunkt for this purpose. Otherwise the battery may be damaged and may catch fire. Using a different charger will invalidate the warranty/guarantee. We recommend that you carry out charging under supervision.

### 6.1 NOTES

- Check carefully whether the nominal input voltage of the charger matches the voltage of the mains supply.
- Charge the battery in a dry place and ensure adequate ventilation. Neither the battery nor the charger may be covered during the charging process.
- Depending on the model, you can remove the battery and charge it separately.
- It takes 2-8 hours to fully charge a battery, depending on the charge status and model. When the charge indicator light on the charger changes from red to green, the battery is fully charged.
- After charging, first disconnect the mains plug (1) and then the plug connected to the battery (2).
- Do not leave the battery connected to the charger permanently and/or unattended.
- Only charge the battery in rooms with an installed smoke detector.
- The use of inverters with a modified sine wave is not recommended and can lead to malfunctions.



## 6.2 LITHIUM-ION BATTERY

*A lithium-ion battery for e-bikes consists of several key components:*

- **Cells:** The basic components of the battery. Each cell contains a cathode, anode, electrolyte and separator. These cells are usually connected in series or parallel to achieve the desired voltage and capacity.
- **BMS (battery management system):** An electronic system that monitors and controls the individual cells. The BMS equalises the charge states of the cells, protects against overcharging and deep discharging, regulates the temperature and ensures safe use.
- **Housing:** The external protection of the battery. It protects the cells from physical damage, dust and moisture. Some housings are removable and enable easy installation and replacement of the battery on the e-bike.

## 6.3 STORAGE OF LITHIUM-ION BATTERIES

*It is recommended to store a lithium-ion battery under the following conditions:*

- **Environmental conditions:** Store the battery in a dry and cool room at temperatures between 15°C and 20°C.
- **Charge level:** If the battery is not used for a long period of time (several weeks or months), ideally store it with a charge of around 30% to 70% of its capacity (two to three out of five charge bars). A permanently higher or lower charge can affect the battery.
- **Avoidance of deep discharge:** An empty battery can self-discharge, especially if it is not used for long periods of time. Self-discharge of 0.5% to 2% per month can occur with stored batteries. A deeply discharged battery may refuse to be recharged.

- **Danger of explosion:** Avoid forcibly charging a deeply discharged battery. Many battery explosions have been caused by such attempts.

## 6.4 CHARGER

ST - 2 Ah 3pin charger

- **Power:** The charger offers an output power of 2 amps, which is a typical and balanced charging speed for e-bike batteries.
- **3-pin connector:** Connect the charger to your e-bike battery via the 3-pin connection. Ensure that the plug is correctly aligned and firmly plugged in.
- **Compatibility:** The charger is tailored to the specific requirements and protection mechanisms of your e-bike battery. This ensures a safe charging process without overheating or overcharging the battery.
- **Loading indicators:** Monitor the charging status using the LED indicators on the charger. The displays inform you whether the battery is currently charging, is fully charged or whether there is an error.

## 6.5 CHARGING INSTRUCTIONS

Please follow these steps to charge your e-bike battery safely and efficiently:

1. **Insert the plug from the charger into the battery:** The charger plug is designed so that it only fits into the battery in a certain position. Ensure that the plug is correctly aligned and insert it gently into the battery.
2. **Connect the mains cable from the charger to the socket:** Connect the mains cable of the charger to a suitable socket. Before connecting, check that the socket is functional.
3. **Monitor the charging process:** During the charging process, the LED on the charger indicates the charging status. Make sure that

the charging process proceeds without any problems.

(Red = the battery is charging, green = the battery is fully charged or has no connection to the battery).

4. Note the loading time: The charging time varies depending on the capacity of the battery and the charging power of the charger. Rely on the charging indicator on the charger or the information on the e-bike display to estimate the charging progress.

5. Disconnect the charger after use: As soon as the charging process is complete, disconnect the charger from the socket and pull the plug out of the e-bike battery.

*Please always follow the specific instructions of your e-bike manufacturer and the information in the operating instructions of the charger to ensure safe use.*

## 7. FUNCTIONAL MODE OF THE DRIVE

The drive system consists of the following components:

- Cadence sensor: Records the cadence
- Smart Controller: Control of the motor taking into account the settings made on the computer
- BMS: Battery with integrated BMS (battery management system)
- Brushless motor: The pedal assistance drive
- Smart Cycling Display: Control and display unit of the folding e-bike (display)

As soon as you start cycling, the system recognises your cadence (the cyclist's pedal movement rate) and cycling speed and controls the electric motor according to the settings made on the computer to provide the right power assistance for your cycling conditions and make cycling easier and more enjoyable.

## 8. BIKE COMPUTER / CYCLING FUNCTIONS

The control unit is integrated into the LC display and controls the drive system. It is located on the handlebars.

## 8.1 SPECIFICATION

- Power supply: 36 V
- Weighted working current: 22 mA
- Stand-by: <math>< 1 \mu\text{A}</math>
- Operating temperature: 10-60 °C
- Storage temperature: 20-70 °C



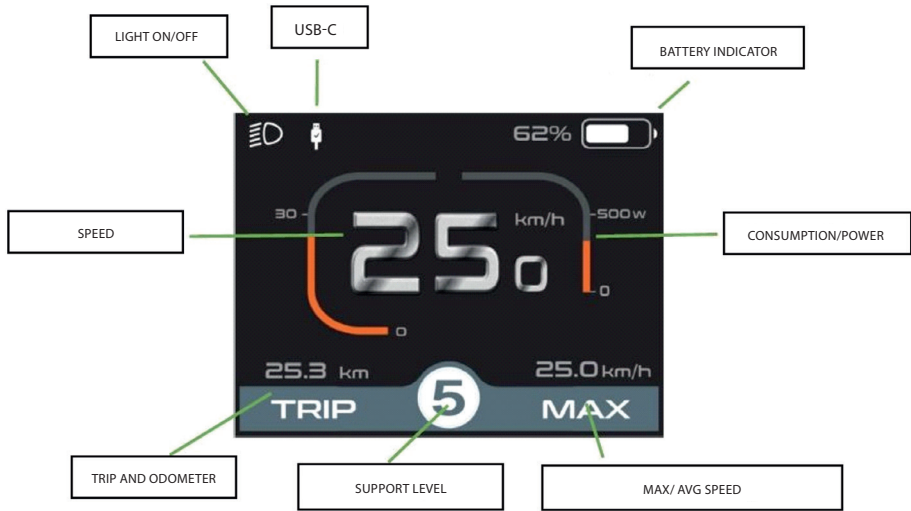
## 8.2 FUNCTION SUMMARY/ DISPLAY INFORMATION

The bike computer has many functions to meet the needs of the user. The display contents are as follows:

- Battery indicator: Voltage value or battery percentage
- Selection and display of the support level
- Intelligent display of real-time speed, maximum speed (MAX) and average speed (AVG).
- Intelligent display of trip and total kilometres (ODO).
- Control and display of the pushing aid
- Travelling time
- Type-C connection
- Auto light function On/Off
- Consumption/Power


## 8.3 DISPLAY SURFACE

After switching on the e-bike system, the display shows the current speed and distance travelled, ODO, power, battery capacity and assistance level.




Briefly press the ON/OFF button to switch between ODO (km) - maximum speed (km/h) - average speed (km/h) - journey time (h).

#### 8.4 PUSHING AID

To activate the slide function, press and hold the lower  button for longer than 2 seconds. The pushing aid is activated and travels at a steady speed of 6 km/h while the screen displays:




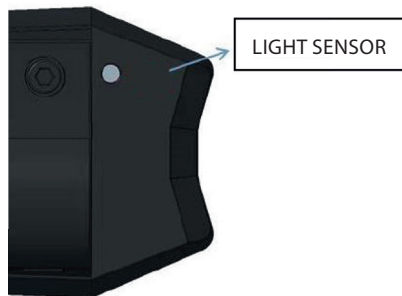
The push-assist function is switched off as soon as you release the lower  button. The e-bike system stops the power output immediately and returns to the state before the push assist was activated.

#### SAFETY NOTE:

*The pushing aid function may only be used when the wheels are in contact with the ground. There is a risk of injury if the pushing aid is activated incorrectly, as the wheel driven by the motor starts to turn.*

#### 8.5 LIGHT FUNCTION

Manually press the top  button for more than 2 seconds. The display switches the light function on or off and the light sensor function is deactivated.



*Make sure that the light sensor on the back of the bike computer is always exposed and not dirty.*

#### 8.6 SUPPORT LEVEL FUNCTION OVERVIEW

The system switches off automatically if the folding e-bike is not used for more than approx. 5 minutes.

Press the buttons **+** or **-** to select the desired support level for the system, from the lowest level 1 to the highest level 5. When switching on, the default setting is level 1.

If power level "0" is displayed, this means that the folding e-bike is in parking mode or you can use it without motor assistance.

**SAFETY NOTE:**

*When moving the pedals, the motor can already start when you are not yet safely seated on the folding e-bike. Only switch on the computer once you have taken a seat on the folding e-bike or set the assistance level to 0 before getting off the folding e-bike.*

**8.7 BATTERY INDICATOR**



When the battery is fully charged to 100%, the indicator lights up white. Only the last 19% are displayed in red, indicating that the battery needs to be charged.

**Battery indicator on the battery:**

There is a button on the top of the battery. The colour display shows the charging status:

- Green: Fully charged
- Yellow: Half charged
- Red: Little charged

**8.8 GENERAL SETTINGS MENU**

Press the on/off button to switch the screen on. To access the settings page, press and hold both the **+** and the **-** button for approx. 2 seconds.

**Reset TRIP:**

Press the buttons **+** or **-** to select "Reset trip". Press the "ON/OFF" button to open the setting. Use the buttons **+** or **-** to select "Yes" or "No". If "Yes" is selected, the maximum speed, average speed, trip distance and trip time are reset at the same time and the display design is reset to standard. To confirm and save the changed setting, press the "ON/OFF" button. Press and hold the "ON/OFF" button to return to the home screen or press BACK to return to the home screen. The above data is not automatically deleted when the screen is switched off or the folding e-bike is switched off.

DISPLAY SETTINGS	
Reset Trip	No
Units	Metric
Brightness	100%
Charge Status	Percent
Auto Off	5Min
Brightness	3
Set Voltage Range	36V
Password	>



Extended	
Max Gear	0-5
Wheel Diameter	24Inch
Speed Limit	25km/h
Battery Information	>
Back	

### Brightness:

"Brightness" refers to the light sensor sensitivity. Press the "ON/OFF" button to access the settings. Press the buttons **+** or **-** to change the sensitivity value; the optional value ranges from 1 to 5 or "OFF". Press the "ON/OFF" button to save the data and exit the brightness settings. Press and hold the "ON/OFF" button to return to the home screen or press BACK to return to the home screen.

### SAFETY NOTE:

*Do not make adjustments while cycling the folding e-bike.*

## 9. ADJUSTMENT AND MAINTENANCE OF THE COMPONENTS

### 9.1 POSITION / HEIGHT OF THE SADDLE (MODEL-SPECIFIC)

A correctly adjusted saddle can minimise discomfort when cycling a folding e-bike and make cycling more efficient. Take some time to find the correct saddle position, as this will improve your overall cycling experience. Saddles can be adjusted in three ways: Saddle height, forward/backward position and tilt angle.

If the saddle can be twisted/adjusted when the quick-release is closed/the screw connection is closed, adjust the quick-release when it is open using the small knurled screw on the quick-release. If you find it too difficult to close the quick release, loosen the knurled screw slightly or tighten the screw that secures the seat post.

The saddle height influences your leverage on the pedals. If it is too low, you will strain your knees. If it is too high, you can rub the saddle excessively. There are various ways to set the correct saddle height. A good option is to sit on the folding e-bike with both feet on the pedals - get a second person to help you so that you don't fall over. Set your pedals to the 6 o'clock and 12 o'clock positions. The lower leg should be fully extended when the heel is placed on the lower pedal. If it is angled, you must adjust the saddle higher. If you cannot reach the pedal with your heel, lower the saddle.

You can change the saddle angle and the front/rear position by loosening the Allen screw (1) and adjusting the saddle as required. Tighten the Allen screw again when you have set the correct position. The suspension seat post can be adjusted from below with an Allen key to ensure optimum comfort while cycling.



## 9.2 HYDRAULIC BRAKES (TEKTRO HD-E500)

Make sure you know how your brakes work before you set off.

- Left brake lever: Front wheel brake
- Right brake lever: Rear wheel brake

To ensure that your hydraulic brake system functions perfectly, it is important to carry out regular functional tests. It is recommended that you visit a specialised company at least once a year to carry out a thorough functional check and maintenance of the brake system.

### SAFETY NOTE:

*Please note that the brakes become hot if they are used frequently. Touching the brakes can cause burns!*

### Independent function tests:

1. **Brake lever test:** Check that the brake levers move freely and that the pressure point is even.
2. **Braking power test:** Test the braking force in a safe environment to ensure that the brakes decelerate effectively and evenly.
3. **Visual inspection of the brake pads:** Visually check the condition of the brake pads for wear. Worn or damaged pads should be replaced.
4. **Brake fluid level:** Check the brake fluid level according to the manufacturer's instructions. If the fluid level is too low, this can impair braking performance.

### SAFETY NOTE:

*The seat post has a marking for the maximum height. However you adjust the saddle: This line should always be below the seatpost clamp and therefore barely visible. The cyclist can suffer serious injuries if the saddle height is set too high and the seat post becomes unstable.*

**Professional maintenance:**

For a comprehensive maintenance and functional check of the hydraulic brake system, you should visit a specialist workshop at least once a year. A qualified bicycle mechanic can:

- Check the brake fluid and top up if necessary.
- Inspect the brake pads and replace if necessary.
- Bleed the brake system.
- Check the brake lines for damage.
- Adjust and check the brake pressure.

This professional maintenance not only ensures optimum braking performance, but also safety while driving.

**Common causes of brake loss or squealing:**

Brake loss or squealing noises can be caused by various factors. The most common causes include:

- 1. Glazed brake pads or discs:** Avoid excessive braking, especially at high speeds. One-sided loading of the brakes can lead to excessive heat development, which in turn can lead to glazed brake pads or discs and squealing noises. Instead, brake alternately with both brake levers in order to distribute the braking force evenly and avoid overheating.
- 2. Dirty brake pads:** Dirt or deposits on the brake pads can lead to brake loss or squealing. Regular cleaning and maintenance of the brakes is important to ensure optimum performance.

**SAFETY NOTE:**

*Please note that the effectiveness of the brakes may vary in wet conditions or on slippery surfaces. When driving, please take into account the possibility of longer braking distances and slippery surfaces and adapt your driving style accordingly (e.g. reduce speed, increase safety distances).*

**Braking in new brake pads:**

Accelerate the bike to 25 km/h.

Brake in a controlled (without locking the wheels) but powerful manner until the vehicle comes to a

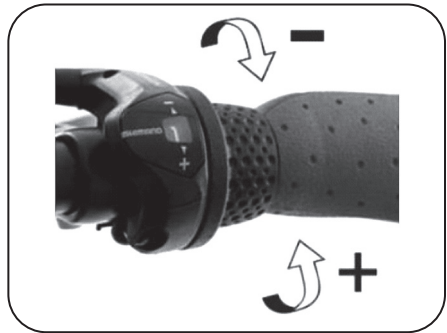
standstill. Repeat this approx. 10-20 times.

**9.3 GEAR CHANGE****OPERATION OF THE GEARSTICK:**

Make sure that you only change gear when pedalling lightly. Carefully shift gear after gear while pedalling with little pressure.

**TWIST SHIFTER:**

The twist shifter on a bicycle allows the cyclist to change gears simply by turning a handle on the handlebars. When the handle is turned, a cable inside the handlebars moves, which is connected to the rear derailleur at the back of the bike. This mechanism causes the chain to jump to different sprockets, which changes the gear ratio and therefore the difficulty of pedalling. The visual display and feedback make it easier for the driver to keep an eye on the current gear.



**GEARSTICK (SHIFT ARM)**

The shift arm is an important component that is responsible for the precise functioning of the gear shift. This is the lever or device that moves the chain between the different sprockets.

**Maintenance instructions:**

- 1. Cleaning:** Keep the shift arm free of dirt and dust. Regular cleaning is important to ensure smooth gear shifting.

**2. Lubrication:** Lubricate moving parts of the control arm in accordance with the manufacturer's recommendations. Use a suitable lubricant for bicycle components.

**3. Adjustment:** If shifting is not precise, check the adjustment of the shift arm. The slightest irregularities can lead to shifting problems.

**Important note:**

*Adjustment and maintenance of the control arm require precise handling. In case of doubt and especially for larger adjustments, this should be carried out by a specialised company to ensure optimum functionality.*

## 10. MAINTENANCE

The following points should be checked after travelling no more than 500 km or at least every six months. This work should be carried out by a certified specialist bicycle workshop. At the end of these instructions you will find a service certificate that your specialised company can stamp. Please note that the maintenance intervals may vary depending on the area of application, for example in very dusty operating environments where shorter intervals may be required.

### 10.1 MAINTENANCE OF THE E-BIKE

- **Cleaning:** Regularly clean the frame, drive components and chain to remove dirt and dust. Make sure that brake pads and brake discs do not come into contact with oil or grease.
- **Check spoke tension:** Make sure that the tension of the spokes on both wheels is even and sufficient to avoid instability and cycling problems.
- **Chain maintenance:** Lubricate and maintain the chain to minimise wear and improve shifting performance.
- **Brakes:** Check and adjust the brakes to ensure that they are working properly.
- **Tyres:** Check the tyre pressure and check the tyres for wear or damage.
- **Suspension:** Check and maintain the suspension elements, if present.
- **Battery:** Check the charge status of the battery and recharge it if necessary. Please also observe the storage recommendations for the battery.
- **Electronics and cabling:** Check the cabling and electronic components to ensure that everything is working properly.
- **Screw connections:** Check all screw connections on the folding e-bike, especially on the brakes and handlebars, to ensure that they are tight.
- **Gearstick settings:** Check and adjust the gearstick to ensure smooth shifting.
- **Lighting:** Check the lighting equipment and replace batteries or LEDs if necessary.
- **Bearing:** Lubricate and check the bearings to ensure the service life and smooth operation of the folding e-bike.
- **Inspection of electrical components:** Check the motor, controller and battery for signs of wear or damage.



- **Safety check:** Ensure that all safety functions, such as brake cut-off and lighting, are working properly.
- **Regular maintenance appointments:** Observe the maintenance intervals recommended by the manufacturer and carry out regular inspections and maintenance work in accordance with the instructions.
- **Professional inspection:** Have your folding e-bike checked regularly by a specialised company, especially if you have no experience with maintenance yourself.

Information: Bicycles are also subject to a certain amount of wear during storage, especially components that are under tension, such as spokes, brake and gear cables, etc.

## 10.2 INSPECTION CHECKLIST

Carried out only by certified specialised bicycle companies.

- Visual inspection (paint damage, cable damage, general condition)
- Check handlebar / wheel / saddle position
- Tighten screws (handlebars, grip, brake, display)
- Tighten screws (lights, reflector, mudguards, luggage rack)
- Check the screw connection of the pedals
- Check wheel nut
- Adjusting the front brake
- Adjusting the rear brake
- Adjusting the gearstick
- Check spoke tension
- Check steering head bearings
- Check bottom bearing
- Check folding system functions (handlebars, frame - free movement)
- Check wiring (plug connections, handlebar cables, brake lines)
- Component care (cassette, chain, bearings)
- Check tyre pressure

### 10.3 BATTERY MAINTENANCE

Please allow an uninterrupted charging time of 6-8 hours for the first 3 charging cycles. The BMS and the battery cells must first be conditioned in order to achieve full performance.

- You can maximise the performance and service life of your battery by charging it regularly before use, even if it is not fully discharged.
- Store the battery at room temperature.
- If you store a fully discharged battery for a longer period of time, this will lead to a permanent loss of function. Recharge an empty battery as soon as possible.
- If the battery is stored for a longer period of time or is not used, store it with approx. 30-70% charge and check regularly that it is still charged. A defective battery due to failure to charge does not constitute a warranty claim. If the battery has a switch (model-specific), this must be switched off.
- Every battery with Li-ion technology is subject to an unstoppable chemical ageing process. This process also takes place without using or charging the battery. The capacity of the battery decreases with increasing age. Decreasing capacity is not a defect and does not constitute a warranty claim.
- To avoid environmental pollution, follow the local regulations for proper disposal of the battery.

### 10.4 MAINTENANCE BEFORE THE FIRST START-UP

- Fully charge the battery.
- Make sure that your folding e-bike is ready for use and adapted to your body, including the position and attachment of the saddle and handlebars.
- Check that the wheels, handlebars, saddle, brakes and all important screws and quick-release levers are securely fastened.
- Check the tyre pressure (information on the minimum/maximum pressure can be found on the sidewall of the tyres). As a rule of thumb, you can check the tyre pressure as follows: If you press your thumb on an inflated tyre, you should not be able to change its shape significantly by applying pressure.
- Operate and ride your folding e-bike in a quiet and safe place first.
- Make sure you know which lever operates which brake. Check the installation and adjustment of the brakes. Push the folding e-bike forwards with the brakes applied. The rear brake should completely prevent the rear wheel from moving, while the front brake should lift the rear wheel off the ground with its braking effect. The steering of the folding e-bike should not rattle or have any play (to the right/left) when braking.
- Do not use the folding e-bike if the computer displays an error message.

### 10.5 MAINTENANCE: BEFORE EACH JOURNEY

- Check the tyres and rims. Look for damage, cracks, deformation or wear and tear as well as any foreign objects such as broken glass or sharp stones. If you find cuts, cracks or holes in the tyres, please do not continue driving. First have your folding e-bike checked by a specialised bicycle workshop.

- Check the frame, fork and mounted components for damage and loose parts.
- Check the functionality of the brakes. Push the folding e-bike forwards with the brakes applied. The rear brake should completely prevent the rear wheel from moving, while the front brake should lift the rear wheel off the ground with its braking effect. The steering of the folding e-bike should not rattle or have any play (to the right/left) when braking.
- Do not use the folding e-bike if the computer displays an error message.

### 10.6. MAINTENANCE: REGULAR CHECKS

- Check that the wheels, handlebars, saddle and all important bolts and quick-releases are securely fastened.
- Check whether the battery is sufficiently charged.
- Check that the brake and gear cables are sufficiently lubricated and that the brake pads are in good condition.
- Check whether the bicycle chain is sufficiently lubricated.
- Check the adjustment of the gears if the gears are not shifting correctly or the chain is making a lot of noise.
- Check that the weld seams of the frame, spokes/ rims are in good condition and free from damage, breakage, corrosion or oxidation.

### 10.7 OPTIMISING THE RANGE

The specified, model-dependent range is a maximum specification.

In in-house driving tests, these ranges were easily achieved or even exceeded.

However, much shorter ranges of less than 30 kilometres are also possible.

The range on a single battery charge depends on many factors, such as:

- Support level/ cyclist's own power - use smaller support levels and increase the cyclist's own power to maximise the range.
- Travel speed - higher speeds, especially with higher assistance levels, cost more battery power.
- Cadence - higher cadences (faster pedalling) optimise efficiency, slower pedalling costs more energy.
- Starting and braking - frequent braking and the associated starting drains the battery faster than long journeys at a steady speed.
- Physical fitness of the cyclist - the more and more often you cycle, the more you increase your physical fitness and will achieve higher ranges.
- Cyclist's shifting behaviour (if gears are available) - Correct shifting optimises efficiency; starting off and ascents are best tackled in a low, easy gear.
- Road conditions - flat road surfaces reduce rolling resistance and increase range.
- Wind conditions/sitting position of the cyclist - upright sitting positions increase wind resistance, and cycling into a headwind requires more energy.
- Weight - the total weight of the bike, luggage and cyclist should be kept as low as possible.
- Tyre pressure - minimise rolling resistance by using the correct tyre pressure; higher tyre pressure ensures lower rolling resistance.
- Temperature - the performance of the battery decreases at lower temperatures. This reduces the range on a single charge in winter. Store the battery at room temperature in winter and only insert it into the bike when you start cycling.

- Computer power display - some computer models display the motor power, an average lower power display means a higher range.

## 11. INTENDED USE

This folding e-bike is designed exclusively for transporting one person. Please fit suitable equipment if you wish to transport luggage and ensure that the maximum permissible load (cyclist + luggage) is not exceeded. It is important that luggage cannot come loose and get caught in moving parts of the bike.

The manufacturer and dealer accept no liability for activities that go beyond the intended use. This excludes non-compliance with safety instructions and possible damage, in particular when using the folding e-bike off-road, overloading of any kind or improper rectification of defects.

**The folding e-bike is designed for use on roads, cycle paths and well-surfaced paths.** It is not designed for extreme loads such as descending steps or jumping.

## 12. TIPS ABOUT E-BIKES: SAFETY, CARE AND RANGE

1. Safety first: Always wear a helmet and observe the traffic regulations. Make sure that your e-bike is equipped with lights and reflectors, especially when cycling in the dark.
2. Regular maintenance: Regularly check the brakes, tyres, lights and the entire electrical system. A well-maintained machine ensures safety and optimum performance.
3. Realistically calculating the range: The range of an e-bike depends on various factors, including terrain, temperature, cycling style and battery condition. Plan your journeys accordingly and follow the manufacturer's instructions.
4. Battery care: Charge the battery in good time and store the e-bike with a charged battery. Observe the recommended charging cycles and

conditions to maximise the service life of the battery.

5. Use a bicycle lock: Protect your e-bike from theft by securing it with a high-quality bike lock. Attach it to a fixed object if you leave it unattended.
6. Ensure a safe cycling style: An anticipatory and defensive driving style is particularly important on bends and at higher speeds. Observe the traffic regulations and be clearly visible to other road users.
7. Keep an eye on the battery: Keep an eye on the battery charge level while travelling. A sudden discharge can lead to unexpected situations. For longer journeys, use the support of lower steps if necessary.
8. Avoid obstacles: Pay attention to road and terrain conditions. Avoid sharp edges, potholes and other obstacles to prolong the service life of your e-bike.
9. Note the vehicle weight: Pay attention to the total weight of the e-bike, including cyclist and luggage. Do not overload the bike to ensure performance and safety.
10. Check insurance: Clarify whether your e-bike is insured and whether the insurance covers theft and damage. Bicycle insurance offers additional protection for your valuable e-bike.
11. Trailer operation: The attachment of child seats, bicycle baskets or similar objects that are attached to the handlebars or saddle should be avoided.

### 13. TECHNICAL INFORMATION

Error codes of the bike computer:

Code	definition
05	Error in the cadence sensor
06	Undervoltage protection
08	Error in the motor Hall signal
09	Faults in other phase cables
11	High motor temperature (reaches the protection point)
12	Error in the current sensor
13	Internal battery temperature error
14	High controller temperature (reaches the protection point)
15	Error in the controller temperature sensor
21	Error in the speed sensor
22	BMS communication error
23	Fault in the front light
24	Error in the front light sensor
25	Error in the torque sensor (torque)
26	Error in the torque sensor (speed)
30	Communication error

**In the event of a possible defect, you can carry out the following steps to check the problem:**

#### 1. Check the cable connections:

Motor cable connector,  
brake sensor connector (both sides),  
display connector

#### 2. Check the cables for possible damage.

#### 3. Remove the battery for 10 minutes.

#### 4. Make sure that there is no moisture on the electronics.

**Note:**

*When checking, it is important to remove the battery beforehand. These steps should help you to identify and rectify any connection problems or damage. If the problem persists, we recommend contacting a specialised company or customer service.*

## 14. FAQ (FREQUENTLY ASKED QUESTIONS)

Below you will find a little help with possible problems, which you can often easily solve yourself:

### **The computer cannot be switched on:**

- Is the battery inserted and charged correctly?
- Is the battery switched on (depending on the model, the battery may have an on/off switch)?
- Remove the battery for approx. 10 minutes, then try again.

### **Battery cannot be charged:**

- (Battery) temperature too low/high?
- Is the plug/charger damaged?
- Is the charger connected correctly?
- Battery already full?

### **Battery indicator - no function:**

- If the battery is switched on (depending on the model, the battery has an on/off switch).

### **The computer displays an error:**

- Remove the battery for approx. 10 minutes, then try again.
- Check that all openly accessible plugs are firmly seated.
- Check all openly accessible cables for damage.
- Check the brakes for possible damage/malfunions.

### **Locking mechanism of the folding mechanism cannot be closed:**

- Check whether the lock is already engaged - release it by pressing the release button.
- Check the setting of the mechanics.
- Clean and grease the mechanics.

### **Parts such as the saddle or handlebars do not sit firmly, twist and rattle:**

- Check any screws for tightness.
- Check any quick-release devices. If parts can be moved despite the quick release being closed, adjust the quick release when open using the small knurled screw on the quick release; if it is too difficult to close the quick release, loosen the knurled screw slightly.

### **Low range:**

- Battery fully charged?
- Tyre pressure OK?
- Frequent starting and braking?
- Ageing/normal wear of the battery?
- Ambient temperature low?

### **Driving noises have changed or something is rattling/grinding etc.:**

- Please check the folding e-bike using the points listed under MAINTENANCE.

### **The lighting does not work:**

- Is the computer switched on and has the lighting been switched on?
- Has a cable been damaged during transport or similar?
- Depending on the model, the front lamp has an additional switch on the lamp itself.
- Some models have a battery or rechargeable battery light at the rear. This must be switched on separately. Please also check the batteries here or check that the lamp is sufficiently charged.

### **The brake light does not work when braking (model-specific):**

- Is the computer switched on?
- Does the drive switch off when the brake is applied? If not, please check the cables on the brakes?
- Due to the system, the brake light only works with the handbrake levers, as only these have integrated switches. The coaster brake has no electrical connection to the system.

### **Brakes squeal:**

- Have the brakes been applied correctly?
- Are the brakes correctly adjusted, including the position of the pads in relation to the disc/rim?
- Are the brake discs discoloured because they have become too hot?
- Are the brake pads worn, damaged, glazed or dirty?
- Depending on the weather and temperature (e.g. cold & humid), this can be a normal phenomenon.

**Discomfort/pain when cycling:**

- Are the saddle and handlebars correctly adjusted?
- Due to the fact that this is a folding e-bike with relatively small wheels, the possible seating position may not be suitable for longer bike tours, depending on the cyclist.

**Repairing/maintaining/replacing brakes, gears and other parts:**

- Please contact your specialised bicycle dealer or Blaupunkt Service. Such maintenance work may only be carried out by trained personnel and is not listed in these instructions for liability reasons. Nor will the specialist bike workshop or Blaupunkt Service provide you with any instructions for this.

**15. WARRANTY/ GUARANTEE**

The warranty/guarantee applies to private use, but not to commercial use or hire. The country-specific regulations apply. You can find this out from your dealer or at <https://www.dotblue-ebike.de/garantie/>.

**Excluded from warranty/guarantee are:**

- Components that are subject to wear and tear, such as saddle, battery/batteries, grips, drive parts, tyres, tubes, lighting system, brakes, fuses, cables, bearings, stands, Bowden cables, stickers, etc. (excluding clear manufacturing or material defects)
- Costs for maintenance, inspection and cleaning work
- All events such as vibrations, colour changes, wear, noise, etc. that do not impair the cycling characteristics

**The warranty/guarantee claim expires:**

- in the event of damage caused by structural modifications to the frame, fork, handlebars, drive unit, electronics or battery
- in the event of damage caused by the installation of accessories or spare parts that are not approved by the manufacturer

c) if the original frame number is unrecognisable

d) if the e-bike has not been used, handled and regularly maintained by qualified personnel in accordance with the specifications stated in the instructions for use

e) in the event of damage caused by accident or vandalism

**Determination of the damage:**

The investigation of the warranty or guarantee case is the sole responsibility of the manufacturer.

**Remedy of defects:**

The warranty/guarantee entitles the customer to rectify the defect. Claims for return, reduction or compensation are excluded.

**Extension of warranty/guarantee:**

Any work carried out under the warranty/guarantee shall neither renew nor extend the warranty/guarantee. The assertion of claims after the expiry of the period is excluded.

**16. SERVICE /SUPPORT**

Should you ever need a repair service, please contact your Blaupunkt dealer. You can find information about service partners in your country at [www.blaupunkt.com](http://www.blaupunkt.com)

## 17. DISPOSAL INSTRUCTIONS

The folding e-bike must not be disposed of with normal household waste at the end of its service life.

It must be handed in at a collection point for the recycling of old bicycles and electronic devices.



*Subject to technical changes.*

*All illustrations are symbolic or example images, the actual equipment/version of the folding e-bike may differ.*



## 18. BIKE PASS

### Owner information:

Name of the owner: \_\_\_\_\_

Contact information: \_\_\_\_\_

Address: \_\_\_\_\_

### Bicycle information:

Model: \_\_\_\_\_

Frame number: \_\_\_\_\_ Colour: \_\_\_\_\_

Date of purchase: \_\_\_\_\_ Purchase location: \_\_\_\_\_

### Special features or customisations:

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### Security features:

Lock type: \_\_\_\_\_ Lock number: \_\_\_\_\_

GPS tracker:  Yes  No

### Emergency contact:

Emergency contact name: \_\_\_\_\_

Emergency contact information: \_\_\_\_\_

### Other notes:

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*Note: This bike pass is used to document important information about your bike and can be useful in the event of theft, repairs or other incidents. **Please** update the information regularly.*

## 19. PROOF OF SERVICE

Ask your dealer to complete and stamp the proof of service.

<b>Date:</b>	<b>km / miles (ODO):</b>
Dealer stamp	
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