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1 IMPORTANT INSTRUCTIONS

Please carefully read all warnings and notes in this user manual before using the Pedelec. We recommend keeping the manual close to your Pedelec, so that it is always at hand.

This operating manual contains four different types of pointers – one providing important information about your new Pedelec and how to use it, one referring to possible damage to property and the environment, and a third type warning against potential falls and serious damage, including physical injury. The fourth one recalls that it is necessary to study the user manual and the assembly instructions carefully.

When you see these symbols, there is always a risk that the danger described may occur.

The warnings break down as follows:



Note: This symbol provides information about how to use the product or highlights specific parts of the user manual that are particularly important.



Attention: This symbol warns of misuse which could result in damaging the product or the environment.



Danger: This symbol indicates possible dangers to your health and life that could arise if specific actions are not made or corresponding care is not taken.



User Manual: Read all of the instruction manuals delivered with the bicycle. If you are unsure about any of the topics addressed in this handbook, contact a Pedelec specialist dealer and ask for help.

2 INTRODUCTION

This part of the operating manual gives you detailed information about the motor's electrical components. General information concerning e.g. the bike's technology and how to ride your Pedelec is located in the other instruction manual.



In order to use the bike lawfully, a mandatory operating manual for the bike's technology (according to the ISO standard 4210:2014) must be enclosed and passed on to you.

Before getting started, read the original user manual and the general Pedelec operating instructions carefully. The manufacturer accepts no liability for damages resulting from non-compliance with these instructions. Your Pedelec must only be used in accordance with its intended use.



Any other use may lead to technical failures and accidents. Liability for defects and warranty will be void in case of improper use.

3 SAFETY INSTRUCTIONS

3.1 General Information

-  When using this product, be sure to follow the instructions given in the user manual.
-  Please ensure you read the chapters “Before the first ride” and “Before each ride” of the general user manual before using the Pedelec for the first time.
- If you lend your Pedelec to a third party, please give them this operating manual along with the Pedelec.
- After reading the user manual carefully, keep it in a safe place for later reference.

3.2 For Your Safety

-  Always apply the Pedelec’s brakes before placing your foot on the pedal. The motor will drive forward as soon as you push down the pedal. This force may be unfamiliar and can lead to falls, danger or even traffic accidents, which could result in injury.
- Do not pay too much attention to the cycle display while riding, otherwise you may cause an accident.
- When riding a Pedelec, make sure that you are fully familiar with the starting characteristics of the Pedelec before riding it. If the Pedelec starts off suddenly, accidents may occur.

- Neither the bike nor the motor may be tampered with to increase the speed or performance of the bicycle. Even the application of tuning kits or modifying the gear transmission is not permitted.

3.3 Pedelec tuning is prohibited

-  Do not modify the Pedelec’s technology in any way. Manipulating the bike in any way to increase performance or speed can lead to legal problems and/or make the bike less safe to ride.

Possible legal implications:

- The Pedelec is required by law to be registered for approval and insured. All legal requirements regarding the bike’s configuration and as stated by the road traffic licensing authority must be adhered to.
- The manufacturer does not offer any kind of guarantee, warranty or liability.
- Criminal consequences cannot be ruled out. For instance, a negligent bodily injury may result in a legal offense.
- Termination of bicycle insurance.

Possible technological implications:

- Tampering with the bike’s technology may limit its capabilities, cause defects or break the bike parts.
- The motor and battery may become overloaded and extremely overheated. Consequences: Irreparable damages and risk of fire.

The breaks and other parts may become overworked. Consequences: Malfunction, overheating, increased wear and tear.

3.4 Installation and Maintenance



The electrical system of your Pedelec is very powerful. If you notice any damage to the electrical system, remove the battery immediately. After a fall or accident, live components may be exposed. If you have a question or problem, please contact your dealer. A lack of expertise can lead to serious accidents.



Before performing any kind of work on your Pedelec, turn off the electric unit and remove the battery. Not doing so may result in serious injury and/or electric shock.



Only perform operations described in this manual. Do not interfere with or modify the system. No modules may be disassembled or opened. If in doubt, always contact a specialist dealer.

Replace parts that are defective or worn, such as the battery, charger, cable, with original spare parts produced by the manufacturer or parts recommended by the manufacturer. Otherwise, the warranty and/or manufacturer's warranty will be voided. If non-original or incorrect spare parts are used, the Pedelec may not function correctly. In the event of a defect, contact an authorized dealer who carries out repairs with original spare parts only.

Improper operation of the drive system and changes made to the battery, charger or drive may result in injury or costly damage. In this case, the manufacturer declines any liability for the damage incurred. Changes to the electrical system may result in criminal prosecution. This may be the case if the maximum supported speed is modified.

3.5 Safety Instructions

- Follow the instructions described in the operating manual while riding your bike.
- Regularly examine the battery charger for damage, especially the cable, plug and casing. If the battery charger is damaged, it must not be used until it has been repaired.
- This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lacking the required experience and knowledge, unless supervised or having received instructions concerning use of the product by a person responsible for their safety.
- Do not allow children to play near the product.
- Contact a retailer if you notice any errors or problems with your bicycle.
- Do not modify the system yourself. Doing so may lead to system malfunctions.
- The product is designed to be fully waterproof so as to withstand wet weather riding conditions. However, do not deliberately immerse it in water.
- Do not clean the Pedelec using a high-pressure cleaner. If water gets into any of the components, operating problems or rusting may result.
- When transporting the product on a high-speed vehicle exposed to rain, remove the battery and store it in a safe place to stop it from getting wet.
- Handle the product carefully, and avoid subjecting it to any strong impacts.
- Important information given in the user manual may also be found in product labels.

- When using or giving out a spare key for the battery, be sure to provide the number on the battery key. Please keep the number in your mind or your notebook.
- Use a wrung-out damp cloth to clean the battery casing.
- For any questions regarding maintenance and use of the product, please contact the dealer where you bought the product.
- Natural wear and tear due to normal use and aging is not within our scope of our quality warranty.
- Please contact your dealer for software updates. The newest information on software will be available on the homepage of BAFANG website: www.bafang-e.com
- Please get to know the Pedelec on a safe piece of land before setting off on your first ride!
- Wear bright protective clothing.
- You are required by law to wear a helmet while riding an S-Pedelec.

3.6 Legal Regulations



Know your country's road traffic regulations and follow them accordingly.

Before riding your Pedelec on public roads, read up on the national regulations applicable in your specific country. Turn to your road traffic licensing authority for information on how your Pedelec must be equipped when operated on public roads.

The following (and additional) information also applies:

- Which light systems have to be installed or carried with you?
- Which brakes must the Pedelec be equipped with?
- There may also be age restrictions that apply to riding in specific areas.
- For example, the issue of children riding on public roads is addressed here.
- If there is an obligation to wear a helmet, it is stated here.

3.7 Intended Use



The electrical components of the BAFANG M615 Drive System are designed for use with Pedelec motors only and may not be used for any other purposes.

The BAFANG M615 Drive System with a performance of 1000 watts is only to be used in combination with e-bikes. Designed and approved for Pedelecs or EPACs. It should not be used for competitions or commercial purposes.

3.8 Quick start

i In this section, you will find important information and instructions that will enable you to safely use your Pedelec as quickly as possible.

Read the safety instructions first and inform yourself on the legal regulations which apply to you.

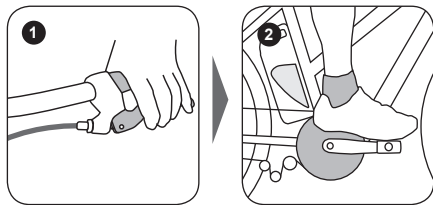
Perform all of the security checks as instructed under the section “Before each ride”.

Read the instructions on how to charge the battery in the chapter “Charging the Battery”.

- Charge the battery until it is fully charged.
- Insert the battery.
- Lock the battery.
- To start the system, push the “” button on the operating unit.
- Select the desired support level via the control unit.

→ **The Pedelec is now ready for operation.**

i Always squeeze the brakes of your Pedelec before placing a foot on the pedal! The motor starts propelling as soon as you step on a pedal. This boost is unusual and can lead to falls or cause dangerous traffic accidents and injury to occur.



3.9 Before the first ride

- Before each ride, fully inspect the bike as described in the operating manual under the section “Before each ride”.
- Charge the battery until it is fully charged.
- Make sure that the battery is sitting securely in its place and is locked into place.
- Please ensure that your Pedelec is ready for use and is adjusted to your body.



Practice operating and riding your Pedelec in a calm and safe place before you take to public roads.



Please also consult the additional user manuals, issued by the individual component manufacturers and which were supplied with your Pedelec or are available online.

3.10 Before Each Ride



Do not start riding your bike if you think your Pedelec may not be in perfect condition. Have a retailer check your bike. Be sure to have a specialist check all of the bike's important parts on a regular basis, especially if you ride your Pedelec intensively. A component may suddenly malfunction if you use it beyond its lifespan or recommended period of use. This may lead to accidents and serious injury.



Before each ride, fully inspect the bike as described in the operating manual under the section “Before each ride”.



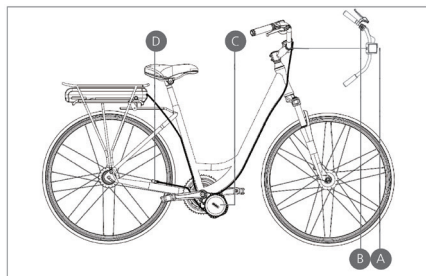
Please make these checks before continuing after a fall or if your Pedelec has fallen over. Aluminum parts cannot be safely bent back into shape, while carbon components can sustain damage which is not recognizable to the eye.

4 ELECTRICAL COMPONENTS



Modern Pedelec technology is high-tech! Working on bicycle parts therefore requires expert knowledge, experience and specialist tools! Do not work on your Pedelec by yourself. Take your Pedelec to a specialist workshop if it is in need of repair, maintenance or restoration.

4.1 Summary of the Components



Display



Control panel



Drive unit



Bicycle wheel speed sensor

4.2 Important Instructions



The electrical system of your Pedelec is very powerful. If you notice any damage to the electrical system, remove the battery immediately. After a fall or accident, live components may be exposed. If you have a question or problem, please contact your dealer. A lack of expertise can lead to serious accidents.



Before performing any work on your Pedelec, disconnect the electrical system and remove the battery.



Do not clean the Pedelec with a steam jet, high-pressure cleaner or water hose. Water may seep into the electrics or drive and destroy the equipment.



The operating temperature should be between -15 °C and +60 °C. The recommended storage temperature is between -20 °C and +35 °C.



Only perform operations described in this manual. Do not change the device. No modules may be disassembled or opened. If in doubt, always contact a specialist dealer.

Replace parts that are defective or worn, such as the battery, charger, cable, with original spare parts produced by the manufacturer or parts recommended by the manufacturer. Any guarantee or liability rights may otherwise become void. If non-original or incorrect spare parts are used, the Pedelec may not function correctly. In the event of a defect, contact an authorized dealer who carries out repairs with the required spare parts only.

Improper operation of the drive system and changes made to the battery, charger or drive may result in injury or costly damage. In this case, the manufacturer declines any liability for the damage incurred. Changes to the electrical system may result in criminal prosecution. This may be the case if the maximum supported speed is modified.

4.3 Display Screen and Control Panel



The 5-button on the external control panel allows you to easily operate the power unit and the display. You can program some of your Pedelec's settings and inform yourself on e.g. your maximum and average speed, daily kilometers, total kilometers, the charge status of the battery, etc. If an error occurs in the system, it will appear on the display screen.



Display Screen



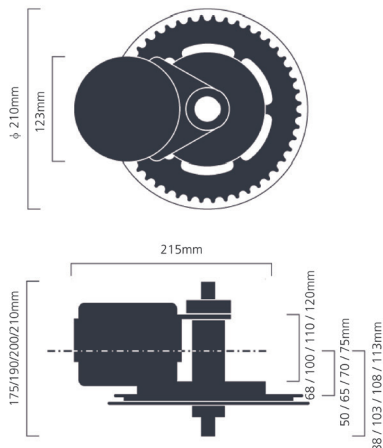
Control Panel

4.3.1 Functions Overview

- Use of a two-way serial communication protocol, simple operation via the additional 5-button keypad.
- Speed indication: Indicate the real-time speed as SPEED, the maximum speed as MAXS and the average speed as AVG.
- Km or mile: The user can choose between km and mile.
- Intelligent battery capacity indication: With an optimization algorithm, a stable display of the battery level is ensured, and the problem of fluctuant battery level indication common with other displays is avoided. The user can define display mode of battery level as voltage or percentage.
- Automatic light-sensitive lights: The headlight, taillight and display backlight will be automatically turned on/ off depending on lighting conditions.
- 5 levels off backlighting: 10% is most dark, 100% is highest light.
- Support levels mode selection: 0-3/0-5/0-9.
- Trip distance indication: The maximum distance displayed is 99999. Single-trip distances TRIP or the total distance TOTAL can be displayed.
- Indication of error messages
- Push assistance
- Intelligent display: including motor's output power W for riding, output current A, Remaining miles RANGE, consumption of energy CALORIES.
- Set access password: user can set access password by himself.
- Set parameters: Power assistance level, wheel diameter, speed limit etc., can be set on the computer via a communication cable. Please see the detailed in the description of the computer parameter configuration.

4.4 Drive unit (mid-drive motor)

i Your Pedelec is equipped with a mid-drive motor (Pedelec: 1000 W). The power unit is located above the bottom bracket.



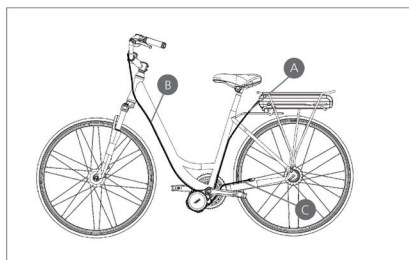
Mid-drive motor

The motor will drive forward as soon as you push down the pedal. The power assistance level varies depending on its settings. The drive unit turns off as soon as you have stopped peddling or have reached maximum speed (Pedelec: 45 km/h). The support is automatically reactivated as soon as the speed is below the maximum support speed and you reapply pressure to the pedal.

i Keep in mind that the motor of your Pedelec can heat up during long uphill runs. Do not touch the motor, as you may get burned.

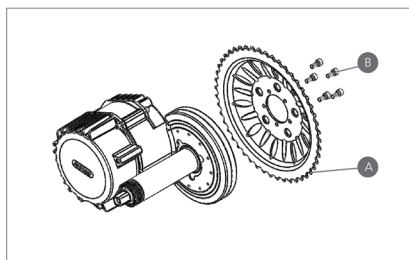
i Note that if the road surface and the support bracket are slippery (e.g. due to rain, snow, sand), there is a risk that the drive wheel of your Pedelec may rotate and slide.

4.4.1 Drive Unit Installation



- A** battery cable
- B** EB-BUS
- C** external speed sensor cable

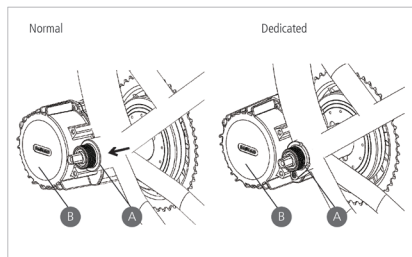
Cables should be arranged in advance according to the e-bike type and the cabling system before installing the drive unit.



- A** chain wheel
- B** 5-M5 screw

Assemble the drive unit from right side of bike frame into bottom bracket.

i Pay attention to the outgoing directions of the cables. Please note that the cables should not be squeezed by the drive unit.

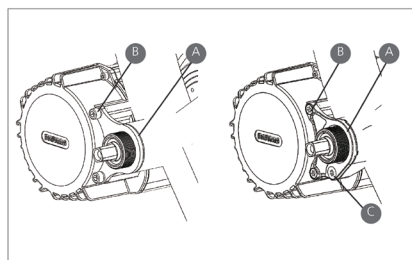


A bottom bracket

B drive unit

Dedicated bottom bracket internal hole, machining it to $\varnothing 33.6\text{mm}$

Assemble the drive unit from right side of bike frame into bottom bracket.



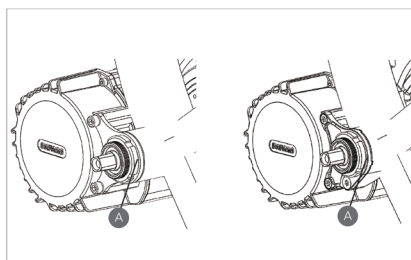
A fixed holder

B 2-M6 screw

C M8 screw(dedicated BB)

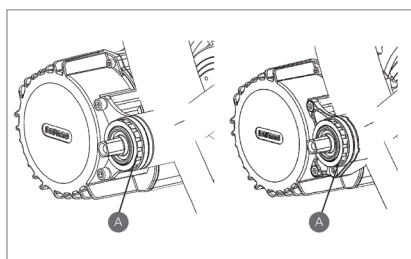
Put the fixed holder on the bottom bracket. Fasten it with M6 screw. Tightening torque: 10 N.m

Dedicated: fasten it with M8 screw. Tightening torque: 20 N.m



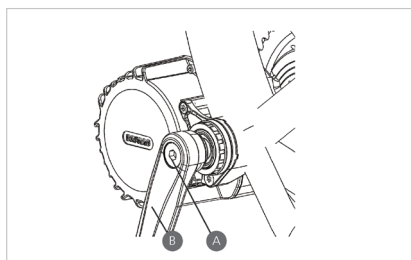
A M33 steel nut

Fasten the dedicated M33 steel nut required torque. Tightening torque: 50 N.m



A M33 aluminum nut

Fasten the dedicated M33 aluminum nut tool to required torque. Tightening torque: 25 N.m



A M8*15 screw

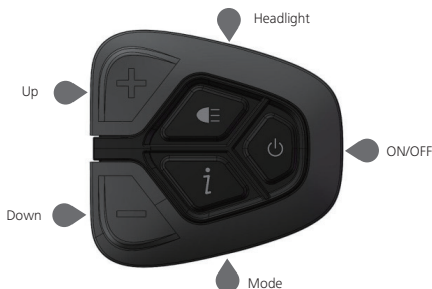
B L/R crank

Assemble the R/L cranks on the main shaft. Lock it with M8 screw. Tightening torque: 35-40 N.m

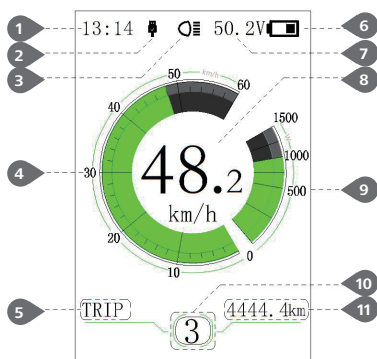


5 DISPLAYS AND SETTINGS

5.1 Buttons on the control panel



5.2 Indications on the Display Screen



1 Time indication:

The time is represented in the 24-hour system and show the current time, time can be set in the "Set clock".

2 USB charge indication:

When external connect into the display, it display the symbol.

3 Headlight indication:

Only shows when headlight is on.

4 Speed scale display:

the scale value is in accordance with the digital value.

5 Mode selection:

single-trip distance (TRIP) → total distance
ODO → maximum speed (MAX) → average speed (AVG) → remaining distance (RANGE) → energy consumption (CALORIES) → time (TIME).

6 Battery indication:

Indicate current battery level value.

7 Voltage indication/percentage indication:

Indicate actual battery level value, display mode can be set in the "Soc View".

8 Speed digital indication:

Display current speed value, speed unit can be set in "Unit".

9 Power scale indication/current scale indication:

Display current output value, output unit can be set in "Power View".

10 Power assistance level indication/push assistance:

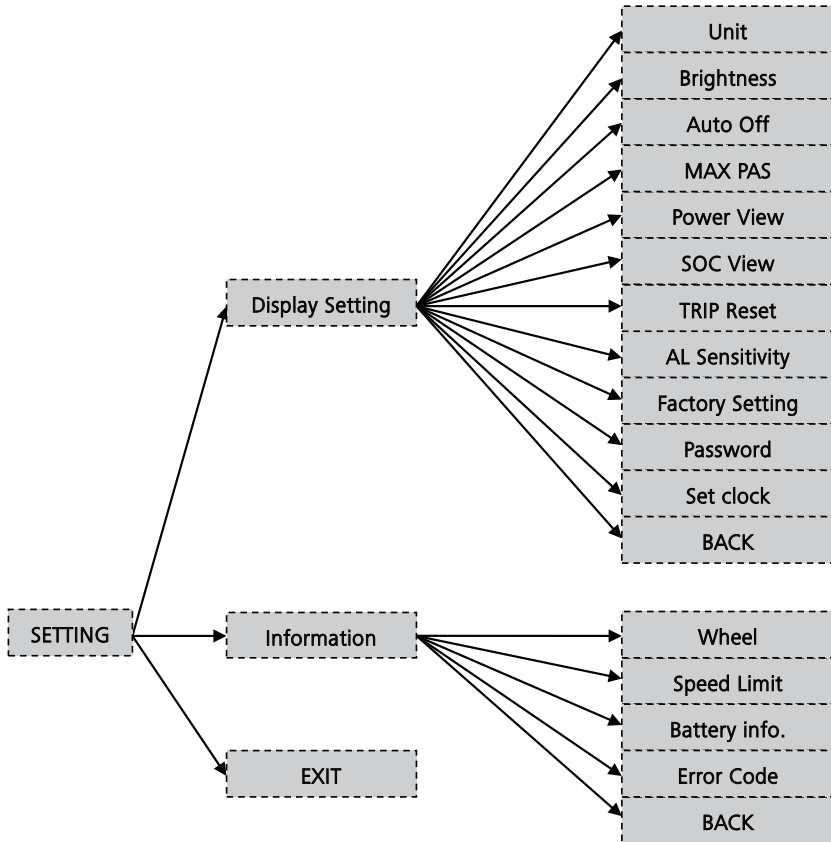
Briefly press (0.5S) or to switch the level. Touch and hold (2S) to start the mode "push assistance", display symbol.

11 Mode data indication:

Display current data corresponding to the mode.

5.3 Basic Setting

- Operating process in the setting interface



5.3.1 Enter into "SETTING" interface

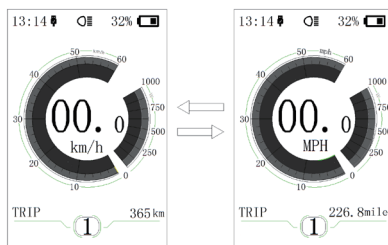
After switching on the display, briefly press ($<0.5s$) **i** for two times to enter into the "SETTING" interface. The interface includes the three options as "Display setting", "Information" and "EXIT". Briefly press ($<0.5s$) **+** or **-** to switch the options and then briefly press ($<0.5s$) **i** to confirm and enter into the option. Select "EXIT" and briefly press ($<0.5s$) **i** to exit the interface or briefly press ($<0.5s$) **i** for two times in any interface to exit the set interface. The set dates are saved for the two exit mode. If there is no any operation within 20s and then exit the set interface, no any dates are saved.

5.3.2 Enter into "Display setting" interface

In "SETTING" interface, briefly press ($<0.5s$) **+** or **-** to select "Display setting" and then briefly press ($<0.5s$) **i** to confirm and enter into "Display setting". There are thirteen set options in the interface.

(1) "Unit"--- unit switch between the km and mile

Briefly press ($<0.5s$) **+** or **-** to select "Unit", and then briefly press ($<0.5s$) **i** to enter into the set interface. Briefly press ($<0.5s$) **+** or **-** to select "Metric"/"Imperial", and then briefly press ($<0.5s$) **i** to save the set and exit back to "Unit" interface. Briefly press **i** for two times (interval time is less than 0.5s) to exit back to main interface, or select "BACK" → "EXIT" to exit back to the main interface.



(2) "Brightness"--- set display brightness

Briefly press ($<0.5s$) **+** or **-** to select "Brightness" and then briefly press ($<0.5s$) **i**. This moment, briefly press ($<0.5s$) **+** or **-** to switch the percentage as "100%" / "75%" / "50%" / "30%" / "10%". 100% is the highest brightness, 10% is lowest brightness. After select the brightness percentage, briefly press ($<0.5s$) **i** again to save the set and exit back to "Brightness". Briefly press **i** for two times (interval time is less than 0.5s) to exit back to main interface, or select "BACK" → "EXIT" to back the main interface.

(3) "Auto Off"--- set automatic Off time

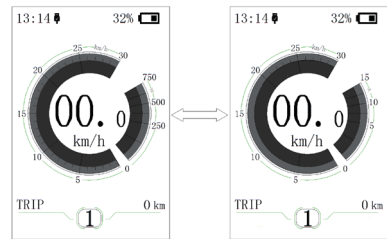
Briefly press (<0.5S) **+** or **-** to select "Auto Off", and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to switch automatic Off time as "OFF"/"9"/"8"/"7"/"6"/"5"/"4"/"3"/"2"/"1". The unit is minute. After selection, briefly press (<0.5S) **i** to save the set and exit back to "Auto Off". Briefly press **i** for two times (interval time is less than 0.5S) to exit back to main interface or select "BACK" → "EXIT" to exit back to main interface.

(4) "MAX PAS"---set riding mode for starting up

Briefly press (<0.5S) **+** or **-** to select "MAX PAS", and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to select support mode: 3/5/9. After confirmation, briefly press (<0.5S) **i** again to save the set and exit back to "MAX PAS". And then briefly press **i** for two times (interval time is less than 0.5S) to exit back to main interface, or select "BACK" → "EXIT" to exit the main menu.

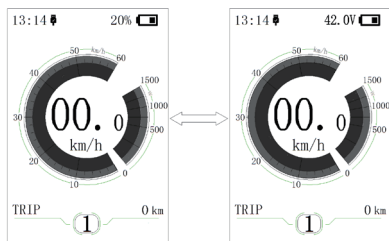
(5) "Power View"--- set output display mode

Briefly press (<0.5S) **+** or **-** to select "Power View", and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to switch the output display mode as "Power"/"Current". After confirmation, briefly press (<0.5S) **i** again to save the set and exit back to "Power View". Briefly press **i** for two times (interval time is less than 0.5S) to exit back to the main interface, or select "BACK" → "EXIT" to exit back the main interface.



(6) "SOC View" --- set indication mode for battery capacity

Briefly press (<0.5S) **+** or **-** to select "SOC View", and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to switch display mode for output as "Percent"/"Voltage". After confirmation, briefly press (<0.5S) **i** to save the set and exit back to "SOC View". Briefly press **i** for two times (interval time is less than 0.5S) to exit back to the main interface, or select "BACK" → "EXIT" to exit back to the main menu.



(7) "TRIP Reset" --- set reset function for single-trip distance

Briefly press (<0.5S) **+** or **-** to select "TRIP Reset", and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to switch between "NO" and "YES". TRIP Reset includes maximum speed (MAXS), average speed (AVG), single-trip distance (TRIP). After confirmation, briefly press (<0.5S) **i** again to save the set and exit back to the "TRIP Reset". Briefly press **i** for two times (interval time is less than 0.5S) to exit the main interface, or select "BACK" → "EXIT" to exit back to the main interface. The data is not reset automatically when turn off the display or turn off the power of the bicycle.

(8) "AL Sensitivity" --- set light sensitivity

Briefly press (<0.5S) **+** or **-** to select "AL Sensitivity", and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to switch level of the light sensitivity between "0"/"1"/"2"/"3"/"4"/"5"/"OFF". "OFF" means close the function. Level 1 is the weakest light sensitivity and level 5 is the strongest light sensitivity. Select the level desired and briefly press (<0.5S) **i** again to save the setting and exit back to "AL Sensitivity". Briefly press **i** for two times (interval time is less than 0.5S) to exit back to main interface or select "BACK" → "EXIT" to exit back to main interface.

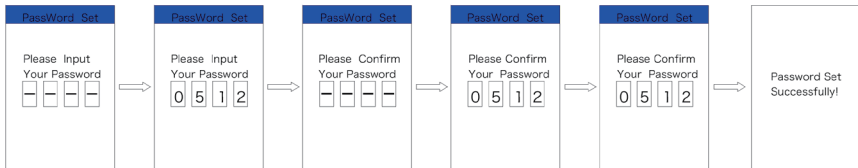
(9) "Password" --- access password setting

Briefly press (<0.5S) **+** or **-** to select "Password" and then briefly press (<0.5S) **i**. This moment, briefly press (<0.5S) **+** or **-** to select "Start PassWord" and then briefly press (<0.5S) **i** again. Briefly press (<0.5S) **i** or to switch between "OFF"/"ON", the below is the specific way of switching.

Starting password:

Enter into "Start PassWord" interface and select "ON". Briefly press (<0.5S) **i**, and then it show input password in the interface. This moment, briefly press (<0.5S) **+** or **-** to switch numbers "0-9", and then briefly press (<0.5S) **i** to confirm input number. After input, it show input password again in the interface. Repeat the above step to input password again. If the password is same with the previous time, the system will prompt it is successful to set password, otherwise it need to repeat the first step to input the new password and then re-confirm.

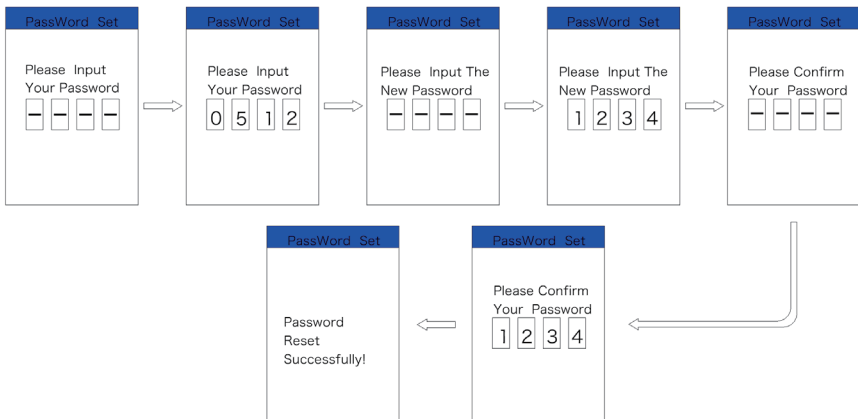
After setting the password, the interface exit back automatically to original interface within two seconds. Briefly press **i** for two times (interval time is less than 0.5S) to exit back to main interface or select "BACK" → "EXIT" to exit back to main interface.



Reset password:

After setting the password, the interface "Password" will add option "Reset Password". Briefly press (<0.5S) **+** or **-** to select "Reset Password", and then briefly press (<0.5S) **i**. This time it prompt input current password in the interface. If inputing wrong password for ten tiems, the display will turn off automatically. When inputing right password, it prompt input new password in the interface. The following step is same with starting password. After changing the password, it will exit automatically back to the original interface within two seconds.

Briefly press for **i** two times (interval time is less than 0.5S) to exit back to the main interface or select "BACK" → "EXIT" to exit back to main interface.



Cancel password access:

Enter into "Start PassWord" interface to select "OFF" and then briefly press (<0.5S) **i**. This moment, it prompt input password in the interface. If inputting wrong password for ten times, the display will turn off automatically. After inputting right password, it prompt it is successful to close password in the interface. Two seconds later, it exit back automatically to the original interface. Briefly press **i** for two times (interval time is less than 0.5S) to exit back to the main interface or select "BACK" → "EXIT" to exit the main interface.



(10) "Set Clock"--- time setting

Briefly press (<0.5S) **+** or **-** to select "Set Clock" and then briefly press (<0.5S) **i**. The time is represented in the 24-hour system. Cursor stays at the first digit of the clock. Briefly press **+** or **-** to select "0-2" and then briefly press (<0.5S) **i** to confirm the selection. This moment, the cursor switch to the second digit of the clock. Briefly press **+** or **-** to select "0-9", and then

briefly press (<0.5S) **i** to confirm the selection. And the cursor will switch to the first digit of the minute. Briefly press **+** or **-** to select "0-5", and then briefly press (<0.5S) **i** to confirm the selection. The cursor will switch the second digit of the minute, and then briefly press (<0.5S) **+** or **-** to select "0-9". Briefly press (<0.5S) **i** to save the selection and exit back to "Set Clock". Briefly press **i** for two times (interval time is less than 0.5S) to exit back to the main interface or select "BACK" → "EXIT" to exit back to the main interface.

5.3.3 Enter into "Information" interface

Enter into "SETTING" interface and briefly press (<0.5S) **+** or **-** to select "Information" and briefly press (<0.5S) **i** to confirm and enter into the interface. It can check all content in the interface "Information", but can't use the display to modify the content.

(1) "Wheel" and "Speed Limit" check

Enter into "Information" interface and it display the data of "Wheel" and "Speed Limit". User can use BAFANG's BESST tool to connect the display and PC to modify the data. Briefly press (interval time is less than 0.5S) **i** for two times to exit back to the main interface or select "BACK" → "EXIT" to exit back to the main interface.

(2) "Battery Info." check

Briefly press (<0.5S)  or  to select "Battery Info." and briefly press (<0.5S)  to enter into information display interface. This moment, select "Next Page" and briefly press (<0.5S)  to switch the display interface. If detecting no data, it display "--". See the content and corresponding explanation shown in the table below:

Display content	Explanation	Display content	Explanation
TEMP	Current temperature	Cycle Times	Cycle Times
TotalVolt	Battery voltage	Max Uncharge Time	Max Uncharge Time
Current	current	Last Uncharge Time	Last Uncharge Time
Res Cap	remaining battery capacity	Total Cell	The number of cell
Full Cap	Battery capacity of Full charged	Cell Voltage 1	Voltage Cell 1
RelChargeState	Relative Charge in percentage	Cell Voltage 2	Voltage Cell 2
AbsChargeState	Absolute Charge in percentage	Cell Voltage n	Voltage Cell n

Briefly press  for two tiems (interval time is less than 0.5S) to exit back to main interface or select "BACK" → "BACK" → "EXIT" to exit back to the main interface.

(3) "Error Code" history check

Briefly press (<0.5S)  or  to select "Error Code" and briefly press (<0.5S)  to enter into the interface. "E-CODE" indicate the error information for last ten times. "E-CODE 1" represents the error content for the last time. "E-CODE 10" represents the error content up to the tenth time. The maximum ten records can be kept. Error code "00" means no error. Please see the error code table to know about the definition of the other codes.

5.3.4 Error Messages



DP C18.UART display can show e-bike faults. When a fault is detected, the icon  will be indicated. One of the following error codes will be indicated.

Error	Explanation	Troubleshooting
03	Brakes enabled	Check whether a brake cable is stuck.
07	High voltage protection	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
08	Fault with motor hall sensor inside	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
10	The motor temperature reaches to the max protection value	Stop the e-bike for a rest.
12	Fault with current sensor inside controller	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
13	Fault with temperature sensor inside battery	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
21	Fault with wheel speed detecting sensor	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
22	BMS communication fault	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
25	Torque sensor torque signal fault	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
26	Torque sensor speed signal fault	Bring your Pedelec to your dealer or to a specialist to have the error fixed.
30	Communication fault	Bring your Pedelec to your dealer or to a specialist to have the error fixed.

Note: Error Code 10 will probably appear on the display when the e-bike is climbing for a long time. This indicates that the motor temperature has reached the protection value, in which case the user needs to stop the e-bike for a rest. If the user continues to run the e-bike, the motor will automatically cut off the power.

5.4 Usual Operation

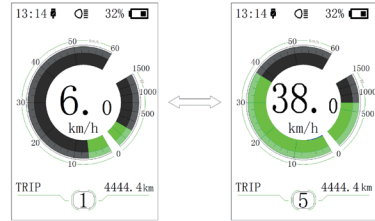
5.4.1 ON/OFF switch

Turn on the power, press and hold (>2S)  to power on the display, the display begin to operate. Press and hold (>2S)  again to power off the display. If the bike is not used, after 5 minutes (time can be set in "Auto Off") the display will be automatically turned off. If the password function of the display is activated, need to input the correct password to enter into the normal display interface.

5.4.2 Power assistance level selection

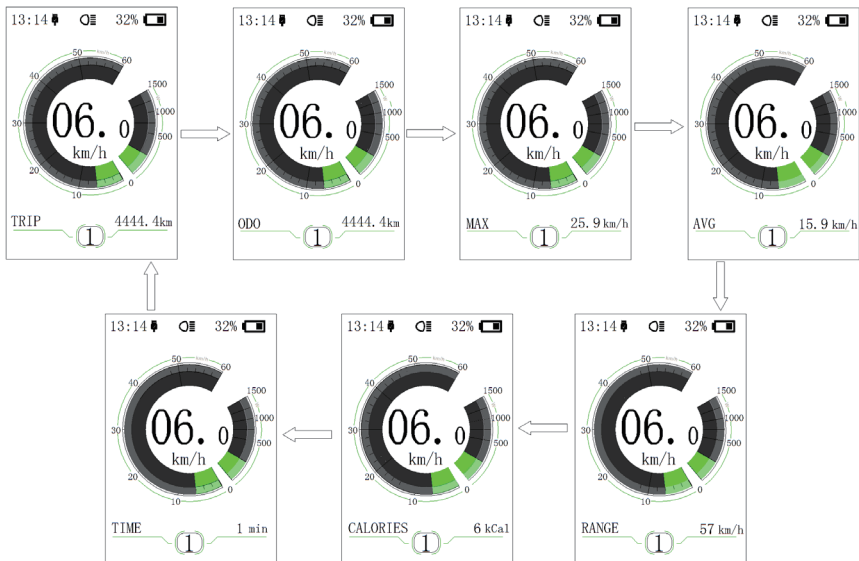
In the manual gearshift mode, briefly press (<0.5S)  or  to switch the level to change the assistance power, The lowest level is Level 0, the highest Level 5. When

the display is on, the default mode is Level 1, "0" means no power assistance.



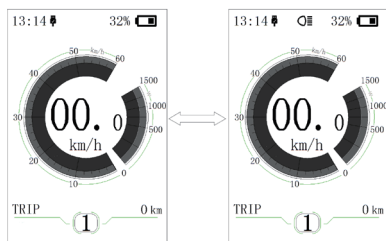
5.4.3 Multiple function interfaces switch

Briefly press (0.5s)  to switch to different data interface, circularly show signal-trip distance (TRIP) → total distance (ODO) → maximum speed (MAX) → average speed (AVG) → remaining distance (RANGE) → energy consumption (CALORIES) → time (TIME). Energy consumption unit CALORIES means kCal.



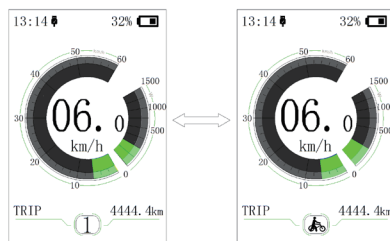
5.4.4 Headlight/Display Backlight Switch

Press and hold (>2S)  to turn on the display backlight as well as headlight. Press and hold (>2S)  again to turn off the display backlight and the headlight. There are 5 levels of backlight brightness that can be selected by the user (can be set in the "Brightness"). (If the display is turned on in a dark environment, the display backlight/headlight will be turned on automatically. If the display backlight/headlight are turned off manually, they also need to be turned on manually afterwards)



5.4.5 Push assistance mode

Press and hold (>2S)  to enter into push assistance mode, the symbol  is displayed, when release key , will exit the push assistance the mode.



6 MAINTENANCE



Before performing any kind of work on your Pedelec, turn off the electric unit and remove the battery. Not doing so may result in serious injury and/or electric shock.



Keep the all components of the electrical system clean. Clean gently with a damp, soft cloth. The components must not be immersed in water or cleaned with a water jet or steam jet. If the components are no longer functional, contact your dealer.



Do not clean the Pedelec with a steam jet, high-pressure cleaner or water hose. Water may seep into the electrics or drive and destroy the equipment.



The frequency of maintenance will vary depending on riding conditions. Periodically clean the chain using an appropriate chain cleaner. Do not use alkaline or acidic cleaning agents to remove rust under any circumstances. If such cleaning agents are used, they may damage the chain and serious injury may result.



Only have maintenance, repairs and repair work carried out by qualified personnel and only with original spare parts. In case of a flat tire or other technical problem, let your dealer carry out the repairs.

7 RANGE OF YOUR PEDELEC



It is best to charge your battery while it is warm and set it just before you start driving.

The battery's drain cycle may be effected by:

- Support level: The higher the assistance level used, the higher the power consumption and the lower the range.
- Driving style: With the optimal use of gear shifting, you can save energy. In lower gears, you need less power, less support, and the drive of your Pedelec consumes less energy.
- Ambient temperature: Batteries discharge faster at cold outside temperatures and have a shorter range.
- Terrain: In hilly terrain, more energy is needed so the range goes down.
- Weather and vehicle weight: In addition to the ambient temperature, wind conditions also influence the range. A strong headwind requires more power when driving. Baggage, etc. will increase the weight and therefore more force is required.
- Technical condition of your Pedelec: Air pressure that is too low in the tires increases driving resistance, especially when riding over a smooth surface, such as asphalt. The range of your Pedelec can be reduced by a grinding brake or a poorly maintained chain.
- Charging status of the battery: The charge status indicates the amount of electrical energy that is stored in the battery at any given time. More energy means more range.

8 TRANSPORTING THE BIKE



Remove the battery of the Pedelec before transportation and transport it separately.

The battery is not considered a hazardous material when transported to operate the Pedelec. The battery becomes a hazardous material when it is transported any other way. In this case, you must follow the appropriate guidelines.



Never send the battery yourself. Batteries are considered hazardous materials. Only send the battery of your Pedelec via your specialist dealer. The battery can ignite or explode under certain conditions.



By Car

You can transport your Pedelec by car as you would a normal Pedelec. Before transporting your Pedelec, remove the battery and transport it separately. The weight of the Pedelec will call for a heavier-duty rack. Always adjust your riding behavior to the load you are pulling in the carrier.



On the Train

The same regulations apply as when transporting a bicycle. Know which busses and trains you can take before using public transportation. It is best to remove the battery from the bike before and while using public transportation.

9 PARTS ALLOWED TO BE CHANGED ON S-PEDELEC/PEDELEC

9.1 These S-Pedelec parts may be changed

During the bike's approval procedure, it is determined which parts may be used for this bike. In other words, the Pedelec is only permitted if your vehicle uses these parts or replacement parts which have been approved for use with your model.

If parts are subsequently changed, please replace these with original parts or replacements which are approved for use on your Pedelec, otherwise you must seek individual permission from the TÜV or your local regulatory authority.

9.2 These Pedelec parts are allowed to be changed

Guide for parts which may be changed on CE-approved Pedelecs with assisted pedalling up to 25 km/h

Category 1

Components allowed to be changed only with permission from the bike's manufacturer/system provider:

- Motor
- Sensors
- Electrical steering
- Electrical cables
- Control panel on the handlebars
- Display
- Battery pack
- Charger

Category 2

Components allowed to be changed only with permission from the bike's manufacturer:

- Frame
- Suspension strut
- Bike fork and suspension fork
- Wheel for the hub motor
- Brake system
- Brake linings (rim brakes)
- Luggage racks (luggage racks determine how much weight the wheel can carry). Both positive and negative changes made to the bike can potentially impact the bike's drivability as compared to that implied by the manufacturer.)

Category 3 *

Components allowed to be changed according to the bike or bike part's manufacturer:

- Foot pedal (only if the distance between the pedal attachment points and crank arms, i.e. the q factor, are adhered to.)

Category 4

Components not requiring any special kind of approval to be changed:

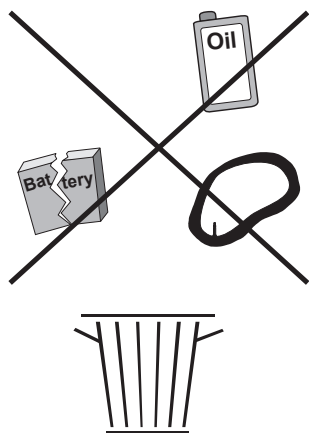
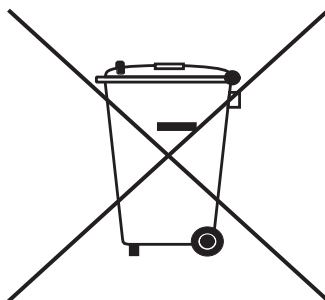
- Chain rings/pulley/sprocket (only if the number of teeth and the diameter are the same as described in the bike's original description.)

10 ENVIRONMENT PROTECTION TIPS / DISPOSAL

General cleaning and maintenance: Please take the environment into account when caring for and cleaning your Pedelec. You should use care and cleaning products which are biodegradable wherever possible. Please make sure that no cleaning agents are disposed of in the sewage.

Pedelec batteries

Batteries belonging to Pedelecs and e-bikes should be treated as hazardous and are therefore subject to compulsory special labelling. They have to be disposed of by specialist retailers or manufacturers.



11 SPECIFICATIONS

11.1 Drive unit (mid-drive motor)

Operating voltage (DCV)	36	/	48
Rated power (W)	750	/	750 1000
Rated efficiency (%)	≥ 80%		
Rated rotational speed (rpm)	130~150		
Maximum torque	≥ 160		
Chain wheel	46 T		
Optional chain cover	Complete coverage/p-formed cover		
Weight (kg)	5.6		
Sensors	Pedal assist speed sensor, bicycle wheel speed sensor, temperature sensor		
Noise (dB)	< 55		
Temperature necessary for use	- 20°C~55 °C		
Protection level (protection against dust, protection against water)	IP 66		
Certification	CE / UL / EN14764		
Optional functions	Light function: DC 500mA/6V headlight and rear light		

12 GUARANTEE AND WARRANTY

i The conditions for guarantee/liability for faults are (partially) harmonized in countries that are subject to EU law. Find out about the relevant national stipulations that apply to you.

Within the scope of EU law, the seller is liable for material faults for at least the first two years from the date of purchase. This includes defects that were present at the time of purchase or handing over. Moreover, during the first six months it is assumed that the fault already existed at the time of purchase.

A buyer can make a warranty claim if the bike was used and maintained as instructed by the manufacturer. These are outlined in the pages of this operating manual and in the supplied instructions from the component manufacturers.

In most cases, the customer can first request subsequent fulfilment. If repair fails conclusively, which is the assumption after two attempts, the customer is entitled to abatement or cancellation of the contract.

Liability for material faults does not cover normal wear and tear within the framework of use as intended. Overtime, operating a Pedelec or e-bike will cause wear to the motor's components and deceleration devices as well as the tires, the lights, the rider's contact points and the battery.

Contact your specialist dealer if your bike's or Pedelec's manufacturer entitles you to additional warranty services. Read the relevant guarantee conditions for further details about the guarantee cover and on how to exercise claims under it.

i In the case of a defect/possible liability claim, please contact your specialist retailer. We recommend filing all purchase receipts and inspection reports as proof for your records.

Legal disclosure

For questions concerning your Pedelec please always contact your dealer first, only then in case the manufacturer of the Pedelec.

Responsible for content and images:

BAFANG

Bafang Electric (Suzhou) Co., Ltd.

No.9 Heshun Rd

Suzhou Industrial Park

215122, Suzhou China

sales@bafang-e.com

www.bafang-e.com

Legal inspection by a lawyer's office specializing in intellectual property.

This user's manual observes the requirements and regulations stated in the machinery directive, ISO 4210:2014 and EN 15194.

If this product is delivered or used outside of the EU territory, the Pedelec manufacturer must provide you with the user manual required in that country.

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NOTES
