

ORIGINAL OPERATING MANUAL DARTMOOR EPAC **E-THUNDERBIRD CF**

TABLE OF CONTENTS



1. GENERAL INFORMATION

1.1 Introduction
1.2 Using the Manual

2. THE USE OF THE DARTMOOR BICYCLE WITH ELECTRIC ASSISTANCE

3. SAFETY OF USE

3.1 Battery charger
3.2 Battery
3.3 Bicycle transport
3.4 Battery storage method
3.5 Battery life
3.6 Warnings regarding the misuse of an electric assist bicycle
3.7 Remaining risks and recommendations (residual risk)

4. INFORMATION OF ELECTRIC BIKE PARTS – PARAMETERS

4.1 Description of the bicycle parts
4.2 Battery
4.3 Charger
4.4 Motor
4.5 Display

5. OPERATION OF A BICYCLE WITH ELECTRIC ASSISTANCE

5.1 Charging the battery
5.2 Installing/Removing the battery
5.3 Display and controller handling
5.4 Personal protection measures
5.5 EPAC bike handling and fitment

6. USE OF THE BICYCLE

6.1 Maintenance
6.2 Usage Notes
6.3 Keys

7. TROUBLESHOOTING

7.1 Diagnostics
7.2 Error codes
7.3 Possible malfunctions
7.4 List of components allowed for replacement

8. DISPOSAL OF WASTE

9. DECLARATION OF CONFORMITY

1.0

GENERAL INFORMATION

1.1 INTRODUCTION

Thank you for purchasing our Dartmoor e-bike. Nothing makes us happier than the people who ride our bikes. We wish you a lot of fun riding our product.

1.2 USING THE MANUAL

Please ask your dealer for an explanation of all major functions. **Please also read each of the attached operating instructions carefully.** In addition, please familiarize yourself with the operating elements of the system and the method of riding an e-bike before riding on public roads for the first time.

If there are any questions regarding the assembly or settings of the E-bike, please be sure to contact your local dealer before putting the E-bike into operation.



2.0

THE USE OF THE DARTMOOR BICYCLE WITH ELECTRIC ASSISTANCE



To define the purpose of the different types of e-bikes, we have divided them into different categories. This is because at the time of designing and creating our bikes, we define differentiation based on tests of requirements adapted to a given type of load to guarantee the greatest possible safety when using our bikes.

Therefore, it is very important to use electric-assist bicycles only for the intended use, otherwise, the load limit could be exceeded, causing damage to the frame or other components. This can result in serious accidents.

The permissible total weight of a cyclist, luggage, and Dartmoor bicycle with electric assistance cannot exceed **130kg**. The maximum weight thus defined may be further limited by a recommendation from the component manufacturer.

THE TOTAL PERMISSIBLE MASS IS CALCULATED AS FOLLOWS:

weight of rider (kg) + weight of EPAC (kg) + weight of luggage (kg) + weight of trailer and load and / or persons (if applicable) = total permissible weight (kg)

The weight of the Dartmoor EPAC bicycle is located on the nameplate near the seat tube. If not specified there, the factory default weight is less than 25 kg. When calculating the total weight, use 25 kg as the weight of the Dartmoor EPAC bike in this case.

Familiarize yourself with the requirements of the category to which your bike belongs. You can identify the category by marking it on the frame. There are 2 categories of e-bikes:

ENDURO

A feature of bikes in this category are wide tires with aggressive tread that allow to defeat demanding and varied surfaces and the use of a front suspension with a large range of travel (150-170mm). In addition, these bikes are suitable for riding on very uneven and difficult rocky terrain with steep gradients and at higher speeds. Regular, moderate jumps by experienced cyclists are not difficult for these bikes.

Nevertheless, jumps can cause unclean landings for inexperienced cyclists, which significantly increase the acting forces and cause damage or injury. However, regular and permanent use of EPAC bikes on north shore routes and in bike parks is prohibited.

Not all mountain hiking trails and marked hiking trails are suitable for cycling. Too large obstacles, very difficult surface and steep slopes may make it impossible to overcome the route, expose the bike to mechanical damage or lead to the destruction of components as a result of material fatigue, and expose the cyclist to the risk of an accident.

It should also be remembered that using the bicycle in off-road conditions leads to faster wear of the bicycle components. Mud, sand, dust, dust, snow, stones, branches, grass and other elements that may be present outside of paved roads have a negative impact on the functioning and life of the components.

The Dartmoor EPAC is integrated with an electric motor that only supports the rider while pedaling. The statutory speed limit for e-bikes in Europe is 25 km/h.

TRAIL

A feature of bikes in this category are wide tires with aggressive tread that allow to defeat demanding and varied surfaces and the use of a front suspension with a medium range

of travel (130-140 mm). Occasional jumps of a maximum height of approx. 60 cm are within the range of use for this category of bicycles.

Nevertheless, jumps of this height may cause unclean landings for inexperienced cyclists, resulting in a significant increase in the acting forces and damage or injury. Not all mountain hiking trails and marked hiking trails are suitable for cycling. Too large obstacles, very difficult surface and steep slopes may make it impossible to overcome the route, expose the bike to mechanical damage or lead to the destruction of components as a result of material fatigue, and expose the cyclist to the risk of an accident.

It should also be remembered that using the bicycle in off-road conditions leads to faster wear of the bicycle components. Mud, sand, dust, dust, snow, stones, branches, grass and other elements that may be present outside of paved roads have a negative impact on the functioning and life of the components.

The Dartmoor EPAC is integrated with an electric motor that only supports the rider while pedaling. The statutory speed limit for e-bikes in Europe is 25 km/h

USING TRAILERS

The Dartmoor EPAC in Trail category is adapted to be used with a trailer for transporting loads and children. Up to two children can be transported in special children's trailers, which are pulled behind the bicycle.

Maximum permissible total weight of the trailer:

If a trailer is used, the maximum weight of the towed trailer is 40 kg (trailer + payload), and the maximum load of the trailer on the towing hitch, which is 6,5 kg

When using the trailer, observe the following rules:

- The trailer with its weight and the weight of the load are included in the permissible total weight of your Dartmoor EPAC bicycle. The calculation formula above must be adhered.
- The trailer hitch may only be mounted using an axle or a special attachment to the rear triangle hook.
- It is not allowed to attach the trailer hitch to the frame tubes, chainstays or seatpost.
- If the attachment of the trailer hitch requires the replacement of the original thru-axle or installing a special adapter to it, make sure that the axle thread coincides fully with the thread used in the frame hook.
- Axle replacements must meet the technical requirements of the original Dartmoor axles (clamp width, pitch and thread length, material, and diameter).
- If the trailer covers the installation of Dartmoor EPAC bicycle lighting, it should be attached to the trailer in a visible place. When driving in the dark, attach the battery lamp to the rear.
- The maximum speed permitted by the trailer manufacturer must be adhered to. For this purpose, read the trailer manufacturer's operating instructions.
- People may only be transported in trailers intended for this purpose.

Children should always use a seat belt as uncontrolled movements of the child may cause the Dartmoor EPAC bicycle or the trailer to overturn.

Always wear a matching helmet for your child. The trailer is not complete protection in the event of an accident. Also, remember to wear a helmet for yourself.

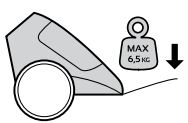
Trailers change the braking specification and width of the EPAC bicycle. Practice driving with an empty trailer first. The long flag improves the recognition of the trailer by motor vehicles.

With the additional load caused by transporting a child, you should take into account a longer braking distance.

The child seat can be mounted on the seat tube on Dartmoor EPAC in Trail category, using a dedicated holder. Nevertheless, the weight of the child and seat must be taken into account in the formula for the maximum weight of the Dartmoor EPAC bike. For safety reasons, we generally recommend the use of a child trailer.



Maximum towing weight of the trailer: **40kg**



Maximum pressure on tow hook: **6,5kg**

RIDING ON PUBLIC ROADS

Comply with the laws relating to riding the Dartmoor EPAC bicycle on and off public roads. These laws vary by country. Please respect the natural environment while driving through forests and meadows. You should only ride the bike on marked and paved roads and lanes.

THE LEVEL OF THE EMITTED ACOUSTIC PRESSURE

The level of the emitted acoustic pressure corrected by the A characteristic is less than 70db (A) at the ear level of the user.

3.0

3.1 BATTERY CHARGER

First read the directions on the outside of the charger label before connecting the battery.

⚠ **Danger!** Failure to follow these instructions will result in death or serious injury.

- Do not allow the battery charger to get wet. If it is wet or water is allowed inside, it could cause a fire, ignition, overheating, or electric shock.
- Do not use it while it is wet, and do not touch or hold it with wet hands. An electric shock may occur.
- Do not cover the battery charger with a cloth while it is in use. Doing otherwise may cause the heat to build up and the case may become deformed, or fire, ignition, or overheating may occur.
- **Do not disassemble or modify the battery charger. If this is not observed, electric shocks or injury may occur.**
- Use the battery charger at the specified power supply voltage only. If a power supply voltage other than that specified is used, fire, explosions, smoke, overheating, electric shocks or burns may occur.
- **Use the specified battery and charger combination for charging and observe the specified charging conditions. Doing otherwise may cause overheating, bursting, or ignition.**

⚠ **Warning!** Failure to follow these instructions could result in death or serious injury.

- Hold the power plug when connecting or disconnecting the plug. Failure to do so may cause a fire or electric shock. If the following occurs, stop using the device and contact your place of purchase. A fire or electric shock may occur.
  - If heat or acrid-smelling smoke is coming out from the power plug.
  - There is a bad connection inside the power plug.
- Do not touch metallic parts of the power plug or the AC adapter if there is a lightning storm. If lightning strikes, electric shocks may occur.
- Do not overload the electrical outlet with appliances beyond its rated capacity, and use only a 100 - 240 V AC electrical outlet. If the electrical outlet is overloaded by connecting too many appliances using adapters, overheating resulting in fire may occur.
- Do not damage the power cord or power plug. (Do not damage, modify, let near hot objects, bend, twist or pull them; do not place heavy objects on top or bundle them tightly.) If they are used while damaged, fire, electric shocks or short-circuits may occur.
- Do not use the battery charger with commercially-available electrical transformers designed for overseas use (travel converters). They may damage the battery charger.
- Always be sure to insert the power plug as far as it will go. If this is not observed, fire may occur.
- When charging the battery while it is installed on the bicycle, do not move the bicycle. The battery charger's power plug may come loose and not be fully inserted into the electrical outlet, resulting in risk of fire.

⚠ **Caution!** Failure to follow these instructions may result in injury or damage to the equipment and surroundings.

- When performing cleaning, disconnect the power plug from the electrical outlet and the charging plug from the battery. If this is not observed an electric shock may occur.
- Do not let the battery touch the same area of skin for an extended period of time while it is charging. The temperature of components may reach 40 to 70°C, which can cause low-temperature burns.
- **Periodically check the battery charger and adapter, particularly the cord, plug, and case, for any damage. If the charger or adapter is broken, do not use it until it has been repaired by the place of purchase or distributor.**
- **Use the product under the supervision of someone responsible for safety and upon receiving usage instructions. Do not allow physically, sensory, or mentally impaired**

persons, inexperienced persons, or persons with no required knowledge, including children, to use the product. Do not allow children to play near the product.

⚠ **Note!** Charging can be carried out at any time, regardless of the remaining battery, but please fully charge the battery in the following cases:

- The battery cannot be used at the time of purchase. Before riding, be sure to fully charge the battery.

If the battery has become completely empty, charge it as soon as possible. If you leave the battery without charging it, the battery will deteriorate and may become unable to be used.

3.2 BATTERY

⚠ Danger!

- Use the specified battery charger for charging and observe the specified charging conditions. Doing otherwise may cause overheating, bursting, or ignition.
- Do not leave the battery near sources of heat such as heaters. Doing so may cause it to burst or ignite.
- Do not heat the battery or throw it into a fire. Doing so may cause it to burst or ignite.
- Do not deform, modify, disassemble or apply solder directly to the battery. Doing so may cause it to leak, overheat, burst, or ignite.
- Do not connect the terminals with metallic objects. Doing so may cause them to short circuit or overheat, and result in burns or injury.
- Do not carry or store the battery together with metallic objects such as necklaces or hairpins. Doing so may cause it to short circuit or overheat, and result in burns or injury.
- Do not place the battery into fresh water or sea water, and do not allow the battery terminals to get wet. Doing so may cause overheating, bursting, or ignition.
- Do not throw or subject the battery to strong shock. Doing so may cause overheating, bursting, or ignition.

⚠ Warning!

- If any liquid leaking from the battery gets into your eyes, immediately wash the affected area thoroughly with clean water such as tap water without rubbing your eyes, and seek medical advice immediately. If this is not done, the battery liquid may damage your eyes.
- Do not use it outside of the operating temperature range of the battery. If the battery is used or stored in temperatures which are outside these ranges, fire, damage to the battery or problems with operation may occur.
  1. During discharge: -10°C - 50°C
  2. During charging: 0°C - 40°C
- Do not use the battery if it has any noticeable scratches or other external damage. If this is not observed, bursting, overheating or problems with operation may occur.
- Do not use the battery if leakages, discoloration, deformation or any other abnormalities occur. If this is not observed, bursting, overheating or problems with operation may occur.

⚠ Caution!

- Do not leave the battery in a place exposed to direct sunlight, inside a vehicle on a hot day, or other hot places. This may result in battery leakage.
- If any leaked fluid gets on your skin or clothes, wash it off immediately with clean water. The leaked fluid may damage your skin.
- Store the battery in a safe place out of the reach of infants and pets.
- Handle components with both hands. Failure to do so may cause the components to fall and break or cause injury.
- If an error occurs during the battery discharge or charge operation, immediately stop using it and check the user's manual. If you are not sure, consult the place of purchase or distributor.
- Avoid touching the battery for an extended period of time when it is at a high temperature. Doing so may cause a low-temperature burn. Riding with a high level of assistance on hot days or charging the battery in direct sunlight may cause the surface temperature of the battery to exceed 60°C (BT-E8036).

3.3 BICYCLE TRANSPORT

By car

The e-bike can be transported like a normal bike. However, one should remember about its greater weight. It is recommended to remove the battery before transport.

By public transport

An e-bike is subject to the same laws as an ordinary bicycle. For greater safety, it is recommended to remove the battery while transporting it, e.g. by bus or train.

By plane

The battery should be considered and transported as a hazardous material. Before the flight, you should contact the airline to arrange transportation details. Due to the high costs of such a solution, it is possible to transport the Dartmoor EPAC bike without a battery and rent it on-site upon arrival, in accordance with the specifications of your electric-assisted bike.

3.4 BATTERY STORAGE METHOD

- If the bicycle will not be ridden for an extended period, store it with a battery level of approximately 70%. Also, charge the battery once every six months to ensure that it is not completely discharged.
- Store the battery or bicycle with battery installed in a cool indoor location away from direct sunlight and rain (estimate: 10 to 20°C). If the storage temperature is low or high, the performance of the battery is reduced, and its useable time will be shorter. When you use the battery after a long storage period, make sure to charge it first.

3.5 BATTERY LIFE

- The battery is an exhaustible item. The battery will gradually lose its capacity to charging after repeated use. If the length of time that the battery can be used and its traveling distance become extremely short, it has probably reached the end of its life, and so you will need to purchase a new battery.
- The life of the battery will vary depending on factors such as the storage method, the usage conditions, the surrounding environment and the characteristics of the individual battery pack.

3.6 WARNINGS REGARDING THE MISUSE OF AN ELECTRIC ASSIST BICYCLE

If you do not understand any point in this manual, please contact your dealer for clarification. Read the entire manual!

You should avoid renting the e-bike to people who have not been instructed in its use and operation. Complaints resulting from the incorrect operation will not be accepted.

The e-bike must not be used by persons who are unable to pedal or operate it themselves. The manufacturer is not responsible for any potential injuries or damage to the bike!

The ideal weather conditions for using an e-bike are on dry days when the outside temperature is above 10°C. If the bicycle is used in colder temperatures, the battery will discharge faster due to physical phenomena. It is not recommended to use an e-bike in temperatures below 0°C.

Do not expose the bicycle to direct sunlight, as it is equipped with a protective temperature sensor for the electric motor.

Do not immerse the battery, charger, or other electrical components in water or any other liquid.

It is forbidden to wash the e-bike with a pressure washer (WAP). Every time you wash your Dartmoor EPAC bike, remove the battery.

It is forbidden to manipulate with the connections of the electric motor, controller, and battery.

Violation of this point may result in irreversible damage to the e-bike and, consequently, the loss of the warranty.

It is forbidden to modify the design of the e-bike, in particular, tuning and any other manipulation of the EPAC bike are forbidden.

The battery must not be deeply discharged due to interruptions during charging of more than 3 months or as a result of improper storage of the battery in conditions beyond the optimal temperature.

It is forbidden to use chargers and elements other than those supplied with the e-bike.

Do not touch the hot brake disc (e.g. after a long descent) immediately after stopping. There is a risk of burns!

As with all mechanical components, the Dartmoor EPAC bicycle is subject to wear and stress. Different materials and components can respond to wear and fatigue stress in different ways. If the structural durability of a component is exceeded, it may suddenly fail, which may result in injury to the user. Any form of crack, scratch, or discoloration in high-stress areas indicates that the component has reached the end of its service life and should be replaced.

In the case of composite parts, impact damage may not be visible to the user. Carbon is an extremely durable material that allows high loads with a low weight of components. However, it has a property whereby possible stresses can damage the joints of the fibers inside - without visible deformations on a given element. In the event of impact - Composite parts should be returned to the manufacturer for inspection or should be replaced.

The manufacturer cannot be held responsible for damage caused by the use of other, unapproved components.

3.7 REMAINING RISKS AND RECOMMENDATIONS (RESIDUAL RISK)

Do not leave without a fitted helmet and glasses. Be sure to wear appropriate and conspicuous light-colored clothing for the ride, especially tight-fitting pants or a leg band, and shoes that are appropriate for the pedal system in question.

You should be especially careful when moving on the roads and obey the road regulations so as not to endanger yourself and others.

When getting on the Dartmoor EPAC, make sure that you do not press the pedals until you are in the correct position on the saddle and that you have a firm grip on the handlebars, and that the pedal is at the lowest position when getting in, as the motor support may activate unexpectedly and the Dartmoor EPAC may not move in an uncontrolled manner. The danger of falling!

Start your first ride with the lowest possible level of assistance while getting used to the additional drive. It is recommended to slowly explore the potential of the Dartmoor EPAC bike in a less frequented place.

When riding the Dartmoor EPAC, be aware that it is a potentially dangerous activity and that the cyclist must always be in control of his bicycle. When going on a tour, remember that you are going faster than a normal bicycle and that EPAC bicycles are usually slightly heavier, which affects the way they are steered. If necessary, a possible introductory course for EPAC bicycle users should be used.

Please note that the brakes of a Dartmoor EPAC are always stronger than the drive. In the event of problems with the drive (for example, if it additionally assisted before a corner), the Dartmoor EPAC should be carefully braked.



INFORMATION OF ELECTRIC BIKE PARTS -PARAMETERS

4.0



4.1 DESCRIPTION OF THE BICYCLE PARTS

Dartmoor E-Thunderbird CF

1. EW-EN100 Display
2. Assist switch
3. Battery
4. Motor



4.2 BATTERY

Model: BT-E8036

Battery main body	Lithium-ion
Nominal capacity	BT-E6000 / BT-E6001 / BT-E6010 / BT-E8014: 11,6 Ah / BT-E6001 / BT-E8010 / BT-E8020 / BT-E8035 / BT-E8035-L: 14 AhBT-E8016 / **BT-E8036: 17,5 Ah**
Operating temperature range	During discharge: -10°C–50°C During charging: 0°C–40°C
Nominal voltage	36 V

Depending on the drive unit, some batteries may be incompatible. For details, refer to the SHIMANO product website (**https://productinfo.shimano.com/**).

The drive unit may not operate correctly if the latest firmware version is not installed. Connect to E-TUBE PROJECT, then update the firmware.



4.3 BATTERY CHARGER

Model: EC-E6002

Input	EC-E6000: 100–240 V AC, 2,5 A, 50/60 Hz **EC-E6002: 100–240 V AC, 1,5 A, 50/60 Hz** EC-E8004 (USA/CANADA): 120 V AC, 1,6 A, 60 Hz EC-E8004 (diferrent countries): 100–240 V AC, 1,9–0,9 A, 50/60 Hz
Output	EC-E6000: 40 V DC, 4,4 A/42 V DC, 4 A, **EC-E6002: 42 V DC, 1,8 A** EC-E8004 (USA/Canada): 42 V DC, 4 A EC-E8004: 42 V DC, 4–4,6 A (input: 100–240 V AC)
Compatible batteries *	SHIMANO BT-E6000, BT-E6001, BT-E6010, BT-E8010, BT-E8014, BT-E8016, BT-E8020, BT-E8035, BT-E8035-L, BT-E8036

* Includes batteries that may not be available in your region.

Charging time from a battery level of 0%

Battery	EC-E6000	**EC-E6002**	EC-E8004	
			100–127 V AC	220–240 V AC
BT-E6000, BT-E6010,	About 4 hours	About 6 hours	About 3 hours	About 3 hours
BT-E8014		30 minutes	30 minutes	30 minutes
BT-E6001, BT-E8010, BT-E8020, BT-E8035, BT-E8035-L	About 5 hours	About 7 hours 30 minutes	About 4 hours 30 minutes	About 4 hours
BT-E8016, **BT-E8036**	About 5 hours 30 minutes	**About 10 hours 12 minutes**	About 5 hours 40 minutes	About 5 hours 48 minutes

4.4 MOTOR

Cechy systemu SHIMANO STEPS

- High-End MTB assistance components.
- Powerful propulsion and silent drive unit.
- Smooth and natural power assistance and riding experience.
- Support optimal suspension design afforded by compact drive unit construction. Shorter chain stay frame gives rider easier handling.
- Assist power stopped simultaneously with the stop of the rider's pedaling. Quickly re-start assistance upon pedaling again. Power assist system cooperates and harmonizes with human output.
- Superior control performance facilitates comfortable riding on mountain trails.
- Efficient pedaling even when power assist cuts off.
- Easy to operate assist switch system designed in accordance with ergonomic principles.
- Cycle computer that is compact without loss in visual clarity provides detailed traveling data by color recognition.
- Q-Factor comparable to mountain bikes reduces burden on the legs from the MTB rider's experiences.
- Optional chain device supports for rough riding conditions available.
- Large-capacity battery allows you to enjoy long rides.
- Intelligent walk assist with SEIS RD provides powerful assistance when walking the bicycle across uneven terrain such as rocky areas.

* The Walk assist mode function may not be able to be used in certain regions.

Battery type	Lithium ion battery	
Nominal capacity	Please read the SHIMANO STEPS special battery and parts user's manual.	
Rated voltage	36 V DC	
Drive unit type	Midship	
Motor type	Brush-less DC	
Operating temperature range:	During discharge:	-10 – 50˚C
Operating temperature range:	During charging	0 – 40˚C
Storage temperature		-20 – 70˚C
Storage temperature (battery)		-20 – 60˚C
Charging voltage		100 – 240 V AC
Charging time		See „**Charging time**" table
Rated drive unit power		250 W

* The maximum speed up to which power assistance is provided is set by the manufacturer and is conditional on where the bicycle is to be used.

Customization of the riding comfort

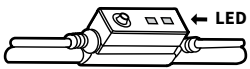
This function is for you to enjoy the assist bicycle as a sports bicycle. Multiple recommended settings regarding the output characteristics of assistance are prepared when you make a purchase and by switching from a compatible cycle computer, it can greatly affect the riding comfort even if it has the same assist mode.

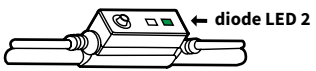
Also, by connecting to E-TUBE PROJECT you can freely adjust the riding comfort more than before. Refer to the user's manual compatible with cycle computers.

4.5 DISPLAY

On the Dartmoor E-Thunderbird CF, the EW-EN100 connector is used in place of the cycle computer. We used this solution to give the user the ability to freely mount additional luggage on the steering wheel. However, if for some reason the user needs to see the parameters while driving, he can connect to the system via Bluetooth using a smartphone and the E-Tube Ride application or Garmin.

The EW-EN100 connector is attached to the brake hose and is located on the handlebar.





EW-EN100

LLED lamps indicate the following status.

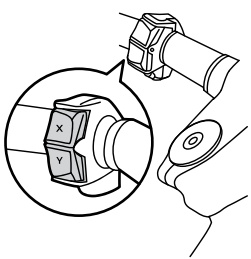
- Current battery level
- Current assist mode

For details, see "Battery level indicator" and "Changing the assist mode".

While power is turned on, the LED2 indicates the battery level.

LED2 indication	Battery level
lit in green	100–21%
lit in red	20% lub mniej
blinking red	nearly empty

Selecting the assist mode: The assist mode switch is located on the left side of the steering wheel. By pressing the X and Y switch you change the mode.



Mode indication via the LED on the EW-EN100 connector



LED (inward)	Assist mode
OFF	OFF
lit in blue light	ECO
lit in green light	NORM
lit in yellow light	HIGHT
OFF	OFF

button

Switching to [WALK] mode (walk assist mode)

- The use of the walk assist mode function is prohibited by law in some regions.
- The walk assist function operates at a maximum of 6 km/h. During electronic gear shifting, the assist level and speed are controlled by the gear position.
- If Assist-Y is not pressed for at least one minute, the system will restart in the mode that was set prior to setting [WALK] mode.
- The intelligent walk assist function activates when an electric shifting system such as XTR, DEORE XT SEIS is connected. The system provides assistance according to the detected gear position. “Intelligent walk assist” support rider more torque output in steep climb condition in lower side gears. “Quick walk assist” function works quickly by holding down SW from any mode.



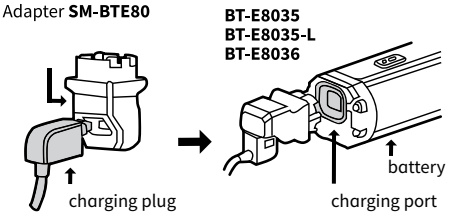
5.0

5.1 CHARGING THE BATTERY

Charging the battery removed from the bicycle

Charge the battery placed on a level surface. Orient the battery and the battery charger as indicated in the figure.

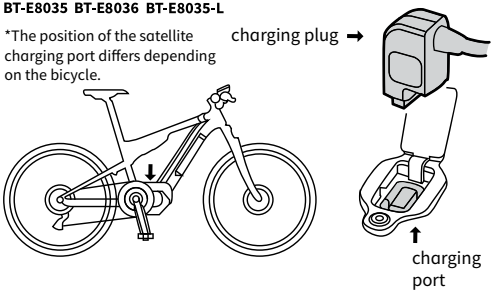
1. Attach the adapter to the battery charger's charging plug.
2. Connect the battery charger's power plug to the electrical outlet.
3. Connect the adapter into the charging port.



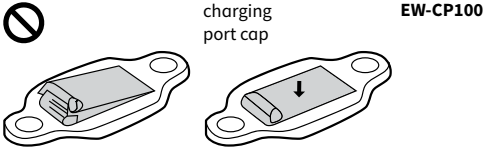
Charging the battery attached to the bicycle

Charge the battery with the battery charger placed on the floor or some other stable surface. Fix the bicycle in place when charging, so that it does not tip over.

1. Connect the battery charger's power plug to the electrical outlet.
2. Insert the charging plug into the charging port on the battery mount or battery.



3. After charging, firmly close the charging port cap.

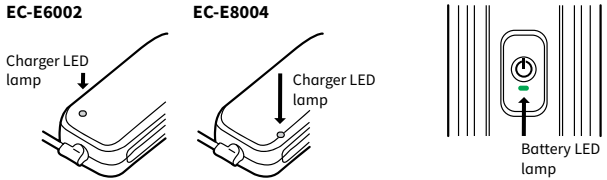


Charger LED lamp

After charging has started, the LED lamp on the battery charger lights up.

Lit up	Ładowanie
Flashing	Błąd ładowania
Off	• Battery disconnected • 1 hour or more after finishing charging • 1 hour or more after an error occurs

⚠ **Notice!** The charger LED lamp does not turn off immediately after charging is complete. Check the charging status using the LED lamp on the battery.



Battery LED lamp

The LED lamp on the battery enables the current charging status and battery level to be checked. The shape of the LED differs depending on the model.

Display while charging

Lighting pattern	Charging status
Repeatedly flashes green 1 time	0-20%
Repeatedly flashes green 2 times	21-40%
Repeatedly flashes green 3 times	41-60%
Repeatedly flashes green 4 times	61-80%
Repeatedly flashes green 5 times	81-99%
Green or black (turns off one hour after fully charged)	100%

Battery level display

You can press the power switch to check the current battery level.

The LED lights up when the battery is attached to the bicycle. (Unless the battery level is at 0%).

Lighting pattern	Battery level
Repeatedly flashes green 5 time	100-81%
Repeatedly flashes green 4 times	80-61%
Repeatedly flashes green 3 times	60-41%
Repeatedly flashes green 2 times	40-21%
Repeatedly flashes green 1 time	20-0%

When the battery level is low, system functions will be shut off in the following order:

1. Electronic assist (The assist mode stops after automatically switching to [ECO]. If the battery-powered light is connected, the mode will switch to [ECO] earlier.)
2. Electronic gear shifting
3. Light

Proper use of the battery

Charging can be carried out at any time, regardless of the remaining battery, but please fully charge the battery in the following cases: Be sure to use the dedicated battery charger.

- The battery cannot be used at the time of purchase. Before riding, be sure to fully charge the battery

If the battery has become completely empty, charge it as soon as possible. If you leave the battery without charging it, it will cause the battery to deteriorate.

- **If the bicycle will not be ridden for a long period, store with the battery level around 70%. Also, make sure to charge the battery every six months to ensure that it does not completely discharge.**

5.2 INSTALLING/REMOVING THE BATTERY (BT-E8035 / BT-E8035-L / BT-E8036)

Installing the battery

The battery is secured to the battery mount with a key. There are several types of keys, so there may be differences with this explanation.

- The battery can be inserted without turning the key.
- For details on the compatibility of the battery and battery mount, check the SHIMANO product website (https://productinfo.shimano.com).

⚠ **Caution!** Firmly hold the battery during installation, being careful not to drop it. Failure to do so may cause the components to fall and break or cause injury.

Keep the following in mind to prevent the battery from dropping while riding.

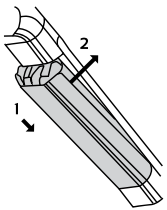
- Confirm that the battery is securely locked to the battery mount.
- Do not ride with the key inserted.

Use the following procedure to insert from the lower side of the battery.

1. Insert from the lower side of the battery.

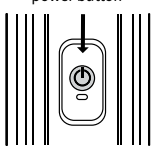
2. Slide the battery. Push it in firmly until you hear it click into place.

⚠ **Notice!** After pushing the battery in, pull the battery to confirm that it is locked securely.



Removing the battery

⚠ **Caution!** Firmly hold the battery during removal or transport, being careful not to drop it. Failure to do so may cause the components to fall and break or cause injury.



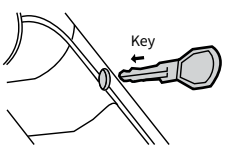
1. Turn the power OFF. If there is a keyhole cap, open it.
* The position and operation of the power switch differ depending on the bicycle.

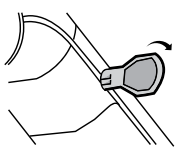
2. Release the battery lock.

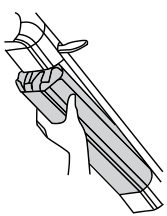
(1) Insert the key into the key cylinder of the battery mount.

(2) Support the battery with your hand, and turn the key clockwise. The battery is unlocked. The double latch plate retains the battery in the designated position and prevents it from falling out.

If the battery does not go down into the designated position, pull out the battery with your hand while turning the key.

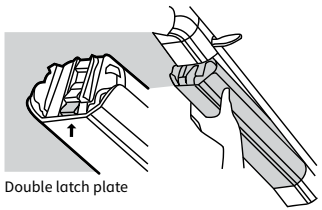






⚠ **Notice!** If the battery is retained with a double latch plate, the double latch plate could deform if struck by a strong external force, causing the battery to drop.

3. Remove the battery. Remove the battery while supporting it with your hand and pushing the double latch plate.



5.3 DISPLAY AND CONTROLLER HANDLING

Power ON/OFF

- The power cannot be turned ON while charging.
- When the bicycle has been stopped for 10 minutes, the auto power OFF function automatically switches the power OFF.

⚠ **Notice!** Check the following prior to turning the power ON.

- The battery is firmly attached to the battery mount.
- The cycle computer is firmly attached to the bracket (refer to the “SHIMANO STEPS cycle computer user’s manual”).
- Do not step on the pedal when turning the power ON/OFF. Doing so may cause a system error.
- The built-in battery of the satellite system on/off switch / cycle computer is charged while the system is running. If the charge is insufficient because of long-term storage, etc., charge the built-in battery using one of the methods below. It takes a maximum of two hours to charge the built-in battery.
- Charge the (main) battery while it is mounted on the bicycle. (BM-E6000 / BM-E6010 / EW-CP100 only).
- When the (main) battery is fully charged, charging of the built-in battery also stops automatically.

• The power can be turned ON using the power button of the (main) battery.

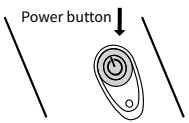
* The power automatically turns OFF if the bicycle is stopped for 10 minutes. When charging for more than 10 minutes, operate any switch on the bicycle or turn the crank to keep the system running.

• Charging can be carried out by connecting the satellite system on/off switch /cycle computer to the PC version of E-TUBE PROJECT. Make a request to the place of purchase.

Turning the power ON from the satellite system on/off switch

The position of the satellite system on/off switch differs depending on the bicycle.

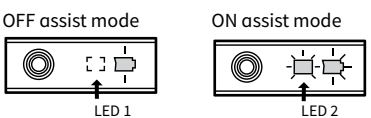
Press and hold the power button for 0.5 seconds.



- The LED turns on for a short period of time. If the power is turned ON normally, the LED will light up for several seconds.
- The LED flashes twice when turning the power ON, if the built-in battery capacity of the satellite system on/off switch has decreased. The built-in battery will be charged if you leave the power ON for a little while.

Switching to walk assist mode

diode EW-EN100



Hold down Assist-Y until it reaches the following state.

- EW-EN100: LED1 lights up blue.

⚠ **Notice!** If it is impossible to switch to [WALK] mode for any reason (such as the speed not being [0 km/h] or there being pressure applied to the pedals), a warning sound will be played when switching.

Walk assist mode operation

1. Continue to press Assist-Y while in walk assist mode.

- Walk assist will function only while Assist-Y is pressed.
- If a switch unit is connected to EW-EN100, the LED1 will flash blue when walk assist starts.

2. Carefully push the bicycle together with walk assist.

3. Removing your finger from Assist-Y will stop walk assist.

4. Press Assist-X to exit walk assist mode.

- When [WALK] mode is canceled, the mode active before [WALK] mode was set, is re-activated.

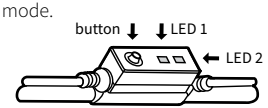
Settings (EW-EN100)

The setting function cannot be used while riding the bicycle.

RD protection reset

In order to protect the system when the bicycle falls and is subjected to a strong impact, the RD Protection function will activate and momentarily severe the connection between the motor and the link, impairing the proper function of the rear derailleur. Executing RD Protection Reset restores the connection between the motor and the link, as well as the function of the rear derailleur.

1. Hold the button down (for roughly eight seconds) until LED1 flashes red. Once LED1 is flashing, release the button. When only LED1 is flashing red, the system is in the RD protection reset mode.



2. Rotate the crankarm. Connection of motor and the link is restored.

Adjust

You can adjust gear shifting only when using an electronic gear shifting unit. If you need to adjust the derailleur, contact the place of purchase.

Connection and communication with devices

The system can be configured and firmware can be updated when the bicycle is connected to a device.

You need E-TUBE PROJECT to configure SHIMANO STEPS and update firmware.

Download E-TUBE PROJECT from the support website (http://e-tubeproject.shimano.com). For information on how to install E-TUBE PROJECT, check the support website.

⚠ **Notice!** Connecting to devices is not possible while charging.

- DSM-PCE1/SM-PCE02 is needed to connect SHIMANO STEPS to a PC. SMJC40/SM-JC41 will be needed in the following situations.
  - There are no free E-TUBE ports on the cycle computer (for example, if using electronic gear shifting).
  - If connecting the switch unit by itself to the PC.
- Firmware is subject to change without notice. If necessary, contact the place of purchase.

About wireless functions

Functions

- ANT connection (EW-EN100) The wireless unit can send all information displayed on the basic screen of the cycle computer to an external device.

  The latest functions can be checked by updating the software via E-TUBE PROJECT. For details, consult the place of purchase.
- Bluetooth® LE connection (EW-EN100) The wireless unit can send all information displayed on the basic screen of the cycle computer to an external device.

  E-TUBE PROJECT for smartphones/tablets may be used if a Bluetooth LE connection is established with a smartphone/ tablet. EW-EN100 are compatible with E-TUBE RIDE, which can be used to check traveling data on a smartphone connected over Bluetooth LE.

How to make connections

- ANT connection (EW-EN100) When the main power is turned ON for SHIMANO STEPS, communication can be received at any time. Switch the external device to connection mode and then connect it.
- Bluetooth® LE connection (EW-EN100) Communication can only be received under the following conditions. Switch the external device to connection mode in advance.
  - Within 15 seconds of the main power for SHIMANO STEPS turning ON.
  - Within 15 seconds of operating any button other than the SHIMANO STEPS power switch.

2.4 GHz digital wireless system

2.4 GHz-frequency digital wireless technology, which is the same technology used for wireless LAN.

However, on very rare occasions, objects and places may generate strong electromagnetic, waves and interference, which may result in incorrect measurement.

- Television, PC, radios, motors/engines, or in car and trains.
- Railroad crossings and near railway tracks, around television transmitting stations and radar bases.
- Other wireless computers or digitally controlled light.

5.4 PERSONAL PROTECTION MEASURES

When moving on and off public roads, the bicycle user should have and use a well-fitting helmet that meets the EN 1078 + A1 standard and glasses. Remember to wear appropriate and bright clothing with reflective elements (according to EN 13356), or at least narrow trousers and shoes that match the pedal system installed.

5.5 EPAC BIKE HANDLING AND FITMENT

In matters of handling and setting (adjusting) other components of the EPAC bike, such as:

- suspension (as recommended by the suspension manufacturer)
- saddle
- handlebar
- seat post
- the stem
- tire pressure
- brake system (including a recommendation to replace friction elements)
- rims (including maximum pressure)
- quick-release axles
- chain
- derailleurs

and the recommended tightening torques for fasteners used in the handlebars, stem, saddle, seat post, wheels, the document „Warranty conditions, bicycle manual", which is attached to the original Dartmoor bicycle manual with electric assistance, applies.

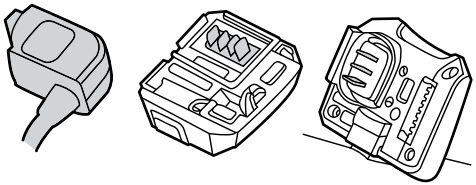
In Dartmoor bikes, the left lever is responsible for the front brake, and the right lever is responsible for the rear brake.

Please note: On wet surfaces, the braking distance increases by approx. 60%.

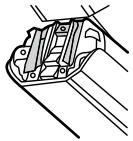
6.1 MAINTENANCE

- Before starting any service work on the e-bike, turn off the assist system and remove the battery. Failure to comply with the above point may result in electric shock.
- On Dartmoor EPAC, the electric parts are covered with plastic covers. For this reason, it is forbidden to use excessive amounts of washing water. When water enters the internal electrical parts, the insulator can corrode, leading to energy leakage or other problems. Use a soft cloth with a neutral detergent to clean the plastic covers. Then dry them with a clean, dry cloth.
- Do not use high-pressure water or compressed air. This could cause water to penetrate into the electrical parts, which could lead to failure.
- Do not store the Dartmoor EPAC bicycle outdoors. It is recommended to keep the bicycle out of the snow, rain, sun, etc. Snow and rain may corrode the bicycle. Ultraviolet rays from the sun can crack the paintwork as well as any other rubber or plastic parts on your bike.
- The frequency of maintenance should depend on the driving conditions. Periodically clean the chain with a dedicated degreaser and lubricate it with an oil dedicated to the conditions of use of the Dartmoor EPAC bicycle. Do not use alkaline or acid detergents as they may cause rust.
- Repairs and maintenance should always be carried out by a qualified bicycle mechanic using genuine parts. In the event of a punctured inner tube or simple operating problems, you can repair yourself if you have the appropriate skills or contact a bicycle service center.
- **In the case of maintenance, washing, and lubrication of the remaining (mechanical) parts of the Dartmoor EPAC bicycle, the document „Warranty conditions, bicycle manual", which is attached to the original Dartmoor e-bicycle manual, applies.**
- Do not use thinner or other solvents to clean any of the components. Doing so may damage their surface.
- When there is dirt on the terminals of the battery mount and battery charger, remove the battery, remove the power plug from the electrical outlet, and then clean them with a clean rag or cotton bud dampened with ethanol, etc. If you repeatedly install and remove the battery while they are still dirty, it may cause wear on the terminals and make them unable to be used.

Terminal example



- Keep the surface where the battery contacts the battery mount clean. If the battery is connected with foreign material such as dirt or dust attached, the battery may become unable to be removed.



- Use a damp, well wrung out cloth when cleaning the battery and plastic cover.
- If you have any questions about the use and maintenance of the product, consult the place of purchase.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.

E-BIKE CLEANER



Foaming cleaner makes e-bike maintenance easy. The rinse--free technology safely cleans motor and battery casings, battery contacts and pins.

- Prevents premature wear of e-bike components.
- Quickly and safely cleans and degreases all bicycle components.
- Does not leave streaks, does not require rinsing with water.



E-BIKE CHAIN LUBE

Chain lube, specially developed for e-bikes that are exposed to extreme conditions.

- Thanks to a special formula, the period between applications has been extended.
- Protects the chain against premature wear.
- Perfectly protects against rust and corrosion.

6.2. USAGE NOTES

Electric bike range

It is best to charge the battery in a warm place and immediately before riding the bicycle.

The discharge of the battery depends on:

- Level of assistance - the higher the level of assistance, the faster the battery drains.
- Driving techniques - skillful gear shifting saves energy. In higher gears, less effort is required and a lower level of assistance can be used. This means that the bicycle uses less energy.
- Ambient temperatures - cooler ambient temperatures deplete the battery faster and ensure a shorter range for the bike.
- Terrain - driving in hilly terrain requires the consumption of more energy.
- Weather and user weight - cold temperatures and strong winds can have an effect on the driving range. A very strong headwind requires more energy. Additional luggage and greater weight of the user increase the loss of the battery.
- The technical condition of the bicycle - low tire pressure or a poorly maintained drive create additional drag, which translates into higher energy consumption.
- Battery charge status - it is the total amount of energy stored in the battery over time. The higher the battery charge, the correspondingly extended range of bicycle us.

Recommendations for gear shifting

For better range, it is recommended to shift gears according to your speed. By low speeds and when starting, low gears are best. The higher the speed, the higher the gear can be selected. For a smooth power assist operation and optimal range, it is recommended that you remove the pressure from the pedals when shifting gears.

Remember:

- High speed, high gear ratio.
- Low speed, low gear.
- Reduce pressure on the pedals when shifting gears.

6.3 KEYS

Two battery lock keys are supplied as standard with the bicycle. A qualified locksmith can make additional keys. For bicycles without a bike lock, charging the battery on the bike may result in the battery lock key not being used for a long time. However, this key is needed for maintenance and repair. Please bear this in mind when storing the bicycle and battery.

7.0

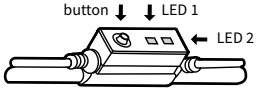
TROUBLESHOOTING

7.1 DIAGNOSTICS

For assistance in the diagnosis, please contact a Sales Point or Shimano Service Center. The service has the necessary diagnostic tools to determine the causes of the fault.

7.2 ERROR CODES

Error indications (EW-EN100)



When an error occurs, the two LEDs on EW-EN100 will quickly flash red at the same time. If this occurs, follow one of the procedures below to reset the indication.

- Press the battery power switch to turn the power OFF.
- Remove the battery from the mount.

If the situation does not improve even after turning the power back ON, consult with a Sales Point or Shimano Service Center.



7.3 POSSIBLE MALFUNCTIONS

Assist function

Symptom	Cause / Possibility	Remedy
Assistance is not being provided.	Is the battery sufficiently charged?	Check the battery charge. If the battery is nearly spent, recharge it.
	Are you riding on long slopes in summer weather or riding for a long time carrying a heavy load? The battery may be overheating.	Turn off the power, wait for a while and then check once more.
	The drive unit, cycle computer or assist switch may be connected incorrectly or there may be a problem with one or more of them.	Contact the place of purchase.
	Is the speed too high?	Check the cycle computer display. Assistance is not provided at speeds set by the manufacturer or more.
	Are you pedaling?	The bicycle is not a motorbike, so you need to operate the pedals.
	Is the assist mode set to [OFF]?	Set assist mode to a mode other than [OFF]. If you still do not feel that assistance is being given, contact the place of purchase.
	Is the system power [ON]?	If you have performed the steps below and still do not feel the assistance, contact the place of purchase. Use the power switch on the cycle computer or the battery power button to turn the power back on.
Assist traveling distance is too short.	The traveling distance may become shorter depending on road conditions, the gear position and total light usage time.	Check the battery charge. If the battery is nearly spent, recharge it.
	The battery characteristics will drop during winter weather.	This is not a sign of a problem.
	The battery is a consumable part. Repeated recharging and long periods of use will cause the battery to deteriorate (lose its performance).	If the distance that can be traveled on a single charge is very short, replace the battery with a new one.
	Is the battery fully charged?	If the distance that can be traveled when the battery is fully charged has decreased, the battery may have degraded. Replace the battery with a new one.

Symptom	Cause / Possibility	Remedy
Pedaling is stiff.	Are the tires inflated to a sufficient pressure?	Use a pump to add air.
Pedałowanie jest utrudnione.	Is the assist mode set to [OFF]?	Set the assist mode to [BOOST]. If you still do not feel that assistance is being given. contact the place of purchase.
	The battery may be running low.	After charging the battery well, check the level of assistance again. If you still do not feel that assistan ce is being given, contact the place of purchase.
	Did you turn on the power with your foot placed on the pedal? .	Turn on the power again without putting pressure on the pedal. If you still do not feel that assistance is being given, contact the place of purchase.

Battery

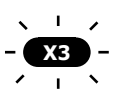
Symptom	Cause / Possibility	Remedy
The battery quickly loses its charge.	The battery may be at the end of its service life.	Replace the battery with a new one.
The battery cannot be recharged.	Is the power plug of the charger securely inserted into the electrical outlet?	Disconnect and then reconnect the power plug of the charger, and then repeat the recharging operation. If the battery still cannot be recharged, contact the place of purchase.
	Is the charging plug of the charger securely inserted into the battery? do akumulatora?	Disconnect and then reconnect the charging plug of the charger, and then repeat the recharging operation. If the battery still cannot be recharged, contact the place of purchase.
	Is the charging adapter securely connected to the charging plug, or to the battery charging port?	Prawidłowo podłączyć adapter ładowarki do wtyku przewodu ładowarki lub do gniazda ładowania akumulatora i ponownie naładować akumulator. Jeśli akumulator nadal się nie ładuje należy skontaktować się z punktem sprzedaży.
	Is the connecting terminal for the battery charger, charging adapter, or battery dirty?	Wipe the connection terminals with a dry cloth to clean them, and then repeat the recharging operation. If the battery still cannot be recharged, contact the place of purchase.
The battery does not start recharging when the charger is connected.	The battery may be at the end of its service life.	Replace the battery with a new one.

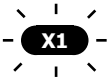
Symptom	Cause / Possibility	Remedy
The battery and charger are becoming hot.	The temperature of the battery or charger may have exceeded the operating temperature range.	Stop recharging, wait for a while and then recharge again. If the battery is too hot to touch, it may indicate a problem with the battery. Contact the place of purchase.
The charger is warm.	If the charger is being used continuously to charge batteries, it may become warm.	Wait a while before using the charger again.
The LED on the charger does not illuminate.	Is the charging plug of the charger securely inserted into the battery?	Check the connection for any foreign objects before reinserting the charging plug. If there is no change, contact the place of purchase.
	Is the battery fully charged?	If the battery is fully charged, the LED on the battery charger turns off, but this is not a malfunction. Disconnect and then reconnect the power plug of the charger, and then repeat the recharging operation. If the LED on the charger still does not illuminate, contact the place of purchase.
The battery cannot be removed.		Contact the place of purchase.
The battery cannot be inserted.		Contact the place of purchase.
Fluid is coming out from the battery.		Contact the place of purchase.
An abnormal odor can be detected.		Stop using the battery immediately and contact the place of purchase.
Smoke is coming out from the battery.		Stop using the battery immediately and contact the place of purchase.
The key does not turn.	Foreign material such as dirt or dust may be stuck in the battery or battery mount.	Turn the key while pushing the battery in the installation direction. If the battery is removed, follow the cleaning procedure to clean it. If the battery is not removed or cleaning does not solve the problem, contact the place of purchase.
The battery rattles.	Are the battery and battery mount installed in the correct position?	Przed ponownym podłączeniem wtyku przewodu.
	Is the installation part of the battery and battery mount deformed?	Contact the place of purchase.
The LED light does not light up at all after pressing the satellite system on/off switch.	Has it been left unused for an extended period of time?	The built-in battery of the satellite system on/off switch needs to be charged. Refer to 5.3. Display and controller handling.

Symptom	Cause / Possibility	Remedy
The LED light does not light up at all after pressing the satellite system on/off switch.	There is a risk that the battery's temperature is above its operating temperature range.	Turn the power ON after leaving the battery for a little while in a temperature range where discharge is possible. If the LED still does not light up, contact the place of purchase.
The screen of the cycle computer or the LED of the satellite system on/off switch turns on for a short period of time when the satellite system on/off switch is pressed, but the power cannot be turned ON .	Is the (main) battery level too low?	Charge the (main) battery.
	Is the (main) battery properly connected?	Check that the (main) battery is securely connected. If the power still does not turn ON, contact the place of purchase.
	The level of the built-in battery of the satellite system on/off switch is too low.	The built-in battery of the satellite system on/ off switch needs to be charged. Refer to 5.3. Display and controller handling.

Battery LED lamp error indication

System errors and equivalent warnings are displayed with various light up patterns of the battery LED lamp.

Lighting pattern*1	Indication conditions	Recovery	Error code*2
Repeatedly flashes 5 times. 	Electrical abnormality in battery detected.	Remove the battery charger after connecting it to the battery. do akumulatora. Make sure to press the power switch with the battery connected. If an error is displayed for the battery alone or E023 is displayed on the cycle computer, have your place of purchase perform the following. • Connect a genuine SHIMANO battery. Also check the power cord for abnormalities. If the error persists, contact your distributor.	E023
Repeatedly flashes 4 times. 	Battery overcurrent protection occurred.	Have your place of purchase perform the following. • Connect a genuine SHIMANO battery. Also check the power cord for abnormalities. If the error persists, contact your distributor.	E024
	This is displayed if an error occurs during charging.	Remove the battery charger from the battery and press the power switch. If an error is displayed, contact the place of purchase.	No display
Repeatedly flashes 3 times. 	If the temperature exceeds the guaranteed operating range, the battery output is turned off.	If the temperature is higher than the temperature at which discharging is possible, leave the battery in a cool location with no direct sunlight until the internal temperature of the battery has decreased sufficiently. If the temperature is lower than the temperature at which discharging is possible, leave the battery indoors until the internal temperature has increased to an appropriate temperature.	W200 W020

Repeatedly flashes 1 time 	Battery does not recognize the drive unit.	Have your place of purchase perform the following. • Connect a genuine SHIMANO battery. Also check the power cord for abnormalities. If the error persists, contact your distributor.	E025

*1 Flashing
*2 Displayed on the cycle computer. The lighting pattern displayed in parentheses may be displayed, depending on the drive unit that is connected.

Lights

Symptom	Cause / Possibility	Remedy
The front light or the tail light does not świeci nawet po naciśnięciu.	The E-TUBE PROJECT settings may be wrong.	Contact the place of purchase.

Cycle computer

Symptom	Cause / Possibility	Remedy
The cycle computer is not displayed when you push the battery power button.	The amount of battery charge may be insufficient..	Recharge the battery, and then turn the power on once more.
	Is the power turned on?	Hold down the power button to turn on the power.
	Is the battery charging?	The power cannot be turned on while the battery is mounted on the bicycle and being charged. Stop charging.
	Is the electric wire connector correctly installed?	Check to see if the connector of the electric wire connecting the motor unit to drive unit is not disconnected. If you are not sure, contact the place of purchase.
	A component that the system cannot identify may be connected.	Contact the place of purchase.
The gear position is not displayed.	The gear position is only displayed when using the electronic gear shifting unit.	Check if the electric wire connector is disconnected. If you are not sure, contact the place of purchase.
Can the beep be turned off.		Change the setting. Refer to „[Beep] Beep setting”.
The setting menu cannot be launched while riding the bicycle.	The product is designed so that if it detects that the bicycle is being ridden, the setting menu cannot be launched. This is not a usign of an abnormality.	Stop the bicycle and then make the settings.

Other

Symptom	Cause / Possibility	Remedy
When pressing the switch, two beeps sound, and the switch cannot be operated.	Operation of the switch being pressed has been disabled.	It is not a sign of a malfunction.
Three beeps sound.	An error or warning is occurring.	This occurs when a warning or error is displayed on the cycle computer. Refer to the section „Error messages on the cycle computer" and follow the instructions provided for the appropriate code.
When using an electronic gear shifting. I feel that the level of assistance weakens	This occurs because the level of assistance is being adjusted to the optimum level by computer.	It is not a sign of a malfunction.
Sound occurs after gear.		Contact the place of purchase.
A noise can be heard from the rear wheel during normal riding.	Gear shifting adjustment may not have been carried out correctly.	For mechanical gear shifting: Adjust the cable tension. For details, refer to the Service Instructions for the derailleur. się z podręcznikiem właściciela przerzutki. For electronic gear shifting: Contact the place of purchase.
When you stop the bicycle the gear does not shift to the position preset in the start mode.	You may have been pressing the pedals too strongly.	If you press the pedals lightly, the gear shifts more easily.

7.4. LIST OF COMPONENTS ALLOWED FOR REPLACEMENT

7.4.1 Components that can be replaced

When certifying a bicycle, it is specified which components can be replaced. This means that only parts that are approved for the specific model can be used on the bicycle.

Parts should only be replaced with original or approved replacement parts for e-bikes. Otherwise, they should be individually certified by TUV or another authorized local body.

7.4.2 Component list

List of components that can be replaced on certified e-bikes up to 25 km/h.

Category 1

Replaceable components only with the permission of the bicycle / drivetrain manufacturer:

- Motor
- Sensors
- Electronic control
- Cables
- Control unit on the handlebar
- Display
- Battery
- Charger

Category 2

Components that can only be replaced with the permission of the bicycle manufacturer:

- Frame
- Rear shock
- Rigid and suspension fork
- Wheels for the hub motor
- Braking system
- Bike rack

Category 3

Components that can be replaced as recommended by the bicycle or component manufacturer:

- Crank (If the distance between the crank and the center of the frame (Q factor) is adhered to)
- Wheel without hub motor (If ETRTO system is adhered to)
- Chain / toothed belt (If the original width is adhered to)
- Rim tape (Tapes and rims must be compatible with each other. Modified combinations may cause the tape to slip and possibly damage the inner tube)
- Brake cables / brake hoses
- Tires (More acceleration, extra weight, and dynamic cornering require e-bike tires. ETRTO compatibility should also be considered).
- Brake pads (Disc, roller, drum brakes).
- Handlebar post module (Unless the length of the cables and / or cables needs to be changed. Within the original length of the cables, it should be possible to change the position of the seat according to the rider's needs. Besides, the weight distribution on the bicycle changes significantly, which can lead to potentially critical characteristics. control).
- Saddle and seat post (If the rearward offset is less than 20mm from the original position. Again, altered weight distribution beyond the intended adjustment range may lead to critical steering characteristics. The length of the saddle rails and shape are also important in this regard).
- Headlights (The headlights are rated for a specific voltage and must match the vehicle's battery. In addition, electromagnetic compatibility (EMC) must be ensured with the headlight being a potential source of interference.

Category 4

Components that do not require a special permit:

- Headset bearings
- Internal bearings
- Pedals
- Front derailleur
- Rear derailleur (All derailleur components must match the number of gears and be compatible with each other)
- Shifter
- Shifting cable and Shifting housing
- Front sprocket / pulley / cassette (If the number of teeth and diameter do not differ from the application range of the original / series)
- Chainguard
- Mudguards (If the width is not less than the original / serial parts, and the distance to the tire is at least 10mm)
- Spokes
- Tube of the same type and valve
- Dynamo
- Rear light
- Reflector
- Reflective light on the spokes
- Kickstand
- Grip with screw clamp
- Bell

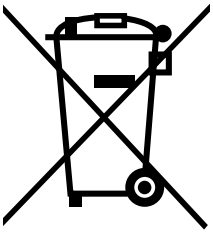
Category 5

Special instructions for mounting accessories:

- The Bar ends of the handlebars are permissible, provided they are correctly mounted to the front (the weight distribution must not be significantly altered)
- Rear-view mirrors are permitted
- Lights for extra batteries / rechargeable batteries are permitted according to the Highway Code.
- Trailers are only permitted with the authorization of the bicycle manufacturer EPAC
- Child seats are only permitt ed with the authorization of the bicycle manufacturer EPAC
- Front baskets should be seen as a risk due to undefined weight distribution. They are allowed only with the consent of the bicycle manufacturer EPAC
- Bicycle bags are acceptable. Observe the permissible total weight, the maximum load in the luggage compartment, and the correct distribution of the load.
- Mounted weather protection is only permitted with the bicycle manufacturer's EPAC approval.
- Front and rear racks are permitted only with the authorization of the bicycle manufacturer EPAC.

Only components with the same parameters as in the bicycle specification, which is available on the website https://dartmoor-bikes.com/ and in the catalog, according to the year of production, should be used.

8.0 DISPOSAL OF WASTE



Symbol of the crossed-out bin – designation of electrical devices, accumulators, and batteries that must not be disposed of with household waste and other waste. Electrical equipment, accumulators, and batteries marked in this way must be disposed of at appropriate collection points for recycling in accordance with the principles of environmental protection.

The Dartmoor EPAC bike must not be disposed of with household waste. It should be delivered to a municipal collection point or a collection point for recyclable materials. The behavior of the bicycle user after its use due to the elements of the equipment that are harmful to the environment has a significant impact on the aspect of environmental protection. Therefore, the user should, in accordance with the law, dispose of the equipment when it is completely incapable of further use. It must take place in the places presented and included in the description that allows for appropriate forms of recycling, partial or complete recovery, or verification for re-use. For more information, please contact the local commune office, city council, or local recipient of municipal pollutants responsible for your location.

Batteries must not be thrown into municipal rubbish containers. Every consumer is obliged to comply with the law regarding the management of used batteries. Take them to a battery recycling company, specialist e-bike dealer, or manufacturer. Batteries containing hazardous substances are marked with a special symbol with a crossed-out garbage can and heavy metal symbols (Cd, HG, or Pb), which classifies them into the appropriate group of impurities. The battery can let heavy metals into the environment. This means that products marked with this symbol cannot be disposed of in classic household segregation conditions.

Lithium-ion batteries should be secured to their poles to prevent the risk of a short circuit and the leakage of hazardous substances. When transporting the battery to a recycling center, follow the local regulations on the transport of hazardous substances. For this reason, such an important aspect is the disposal of these elements in the places described above.

9.0

VELO

Deklaracja zgodności

Declaration of conformity

Nr 003

PRODUCENT: *Manufacturer:*	VELO sp. z o. o. Ul. Pszczyńska 305 44-100 Gliwice

Deklarujemy z pełną odpowiedzialnością, że nasz produkt:
We declare with full responsibility, that our product:

NAZWA,: *Name:*	**Dartmoor**
MODEL: *Model:*	**E-Thunderbird CF**
ZASTOSOWANIE: *Application:*	**Rower ze wspomaganiem elektrycznym Pedelec (EPAC)**

Jest zgodny z następującymi dokumentami odniesienia:
Compliance the following documents of reference:

DYRYKTYWY: *Directives:*	**2006/42/UE** **2014/30/UE** **2014/35/UE** **2011/65/UE**
NORMY: *Harmonized standards:*	**PN-EN 15194:2018-01**

Nazwisko i adres osoby upoważnionej do przygotowania dokumentacji technicznej: *Name and address of the person authorized to prepare the technical file:*	**Wojciech Gorol** ul. Pszczyńska 305 44-100 Gliwice

Niniejsza deklaracja zgodności zostaje wydana na wyłączną odpowiedzialność producenta.
This declaration of conformity is issued under the sole of the manufacturer.

Gliwice, 04.04.2022r.
Miejsce, data:
Place, date:

Tomasz Radzki
Podpis osoby upoważnionej
Signature of authorized person


DARTMOOR
DER KAISER PROJEKT 2.4
CONTINENTAL
FOX
38

DARTMOOR

#RIDEYOUR**WAY**

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