



INSTALLATION MANUAL



Battery for electric bicycle drive

EVBAT36V13AH-S

EVBAT36V16AH-F

EVBAT48V13AH-F

Thank you for purchasing EVBIKE battery set. We believe that you will be fully satisfied with its use.

Before installing and first use, read carefully the instructions!

If you have found in the manual the fact, that could prevent you the use of the product, please return it before installing in the undamaged original packaging back. For the current warranty conditions and the possibility of returning, please contact your dealer who will advise you how to proceed.



CAUTION

EVBIKE SET IS SOLD AS THE CONVERSION KIT. SAFETY AND COMPLIANCE WITH LEGISLATIVE REQUIREMENTS OF THE FINAL PRODUCT IS FULLY GUARANTEED BY THE OPERATOR OF A BIKE OR WHOEVER BUILT AND THEN SOLD THE CONVERTED BIKE. WE RECOMMEND THAT YOU ENTRUST CONVERSION OF THE BIKE TO AN AUTHORIZED SERVICE CENTER.

PLEASE READ CAREFULLY THIS INSTALLATION MANUAL BEFORE YOU WILL START EVBIKE CONVERSION.

Note: This user manual was translated from the Czech original.

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- Warnings for battery use – possible danger

SPECIFICATION

SPECIFICATION	EVBAT36V13AH-S	EVBAT36V16AH-F	EVBAT48V13AH-F
Nominal voltage:	36 V	36 V	48 V
Discharge capacity:	13 Ah/468 Wp	15,6 Ah/562 Wh	13 Ah/624 Wh
Constant discharge current:	15 A	15 A	20 A
Peak discharge current:	26 A	26 A	35 A
Minimal voltage:	29 V	29 V	37,7 V
Charging voltage:	42 V	42 V	55 V
Charging current:	2 A/5 A	2 A/5 A	2 A/5 A
Cycle life: *	<600	<600	<600
Weight:	2.7 kg	3.3 kg	3.4 kg
Number of articles:	50 (5P10S)	60(6P10S)	65(5P13S)
Dimensions:	20 x 7 x 10 cm	20 x 7 x 11.7 cm	21,5 x 11.7 x 8.2 cm

* After 600 cycles is capacity still at 70 %



INSTALLATION (BEFORE FIRST TIME USE)

Before first time use charge the battery to the full capacity (see chapter Using the Battery). The first process of charging may take a longer time due to balancing the voltage in the individual cells. Please do not disconnect the battery before the indication LED lights green.

INSTALLATION OF THE BATTERY

You can install battery in bag on frame tube, or under saddle or to the backpack. For more stability of battery on frame we recommend the use of plastic strap.



USING THE BATTERY

1. Proper charging

Lithium cells which contain EVBIKE batteries can be recharged at any level of charge or discharge - these batteries have no memory effect. We recommend always after the ride, to recharge the battery so you can immediately enjoy full power and a long driving range. After recharge always unplug the battery from the charger. Charge the battery only at room temperature (25 °C). Charging at temperatures below freezing and vice versa charging the battery exposed to excessive sunlight is prohibited.

Current state of charging is indicated by LED color lights on charger:

- RED – charging in progress.
- GREEN – charging finished (charger is now disconnected from battery).

The charging time is 3-7 hours depending on battery condition.

2. Proper discharging

Recharge the battery to full capacity after the the first disconnection of protective controller. Never try to reuse the battery after protective disconnection! Deep discharge of some cells and their unreparable damage may happen! Such battery usage may also cause unbalance of battery cells voltage and decrease their capacity. In extreme cases, the battery can not be recharged again. This kind of damage can be easily diagnosed and will result in avoiding your warranty.

3. Storage

If you do not use the bike for more than 48 hours, always disconnect and remove the battery, recharge it and store in a safe dry place at room temperature. Beware of short-circuit the battery terminals (contacts) when storing and handling. For long-term storage, such as off-season, it is also necessary after 1 month recharge the battery to its full capacity. If you do not perform this maintenance deep discharge of the battery cells will occur. This irreparable battery damage is not covered by warranty.



SAFETY PRECAUTIONS AND INSTRUCTIONS FOR THE END CONSUMER

1. Warranty

The warranty for quality relates to any manufacture defects that the battery provably demonstrated already at the time of delivery and to the nominal battery capacity at the time of the delivery. The warranty relates to normal operation functionality within the specifications given by the producer. The guaranteed nominal capacity of the battery is achieved by discharging by the recommended discharge current based on the type of the battery and temperature of 25°C. The warranty does not include any drops of cell capacity within the tolerance given by the producer in the form of the number of charging and discharging cycles. The warranty applies neither to any defects resulting from some mechanical damage, use outside the permitted range of the discharge and charge current and voltage, unintentional short circuit, unintentional discharge, i.e. when the battery is left over 14 days without any control, nor to any damage caused by leakage of liquids nor by using it or storing in a humid environment. One of the conditions for granting any warranty is keeping all recommendations mentioned in this manual. The duration of warranty is stated on the delivery note of the reseller.

2. Using the battery – possible danger:

Danger of short circuit and subsequent fire

Both charged and discharged cells contain a large amount of electric energy that may cause electric sparks or electric arc if the contacts are shorted. The red-hot contacts may ignite other flammable materials.

Danger of injury by direct current

If there are a larger number of cells connected as a series, there is a higher danger of injury by direct current. Never ever touch the electric wires or other components with voltage.

The danger of chemicals.

Lithium cells and batteries do not contain any corrosives or acids. Still they contain chemicals that may affect human organism. That is why it is necessary to keep in mind the following principles when manipulating with the cells and batteries:

- a) Eye protection: protect your eyes with glasses to prevent any chemicals from getting to your eyes.
- b) Skin protection: use protective clothing and gloves. Prevent your skin from any contact with the chemicals.
- c) Protection against inspiration: work with the batteries only in a well ventilated place. In a closed environment it is necessary to provide forced ventilation.

Danger of fire when damaged cells

Damage of cells can start chemical reaction and fire of battery. Exercise caution, when using batteries to prevent mechanical damage.

3. Instructions for consumers:

The battery can be used only by a person who has been properly instructed about using the lithium cells and batteries. This instruction must be provided by the last seller. In case of a distant sale, this instruction is done by attaching a manual. Further information regarding using the battery can be found on the website of the reseller.



4. General rules for using and storing batteries

- Protect from unqualified manipulation.
- Avoid polarity mismatch, heed the signs when inserting. Reverse insertion of the battery may result in short circuit or charging.
- Avoid short circuit. Short circuit results from connecting positive (+) and negative (-) terminals of the battery.
- Prior to installation clean the pole terminals of both the battery and the device.
- Avoid excessive heating – operate the battery only at a temperature based on the concrete specification.
- Do not weld or solder the cells.
- Do not dismantle. If uncovered, the contact with the individual parts of the battery may be harmful.
- Do not deform. The batteries should not be pressed, pierced etc.
- Do not keep within the reach of children. Especially batteries that could be swallowed need to be kept out of their reach. Also children must not be allowed to replace the batteries without the supervision of an adult.
- Do not encase or do any other modifications. Encasement or any other modification to the battery may cause blockage of the safety ventilation mechanism. Any modifications need to be consulted with the reseller.
- Batteries that are not used need to be stored charged and kept out of reach of any metal subjects that could cause short circuit. The pieces that are already unpacked should not be mixed and stored together.
- Avoid extreme humidity (over 95%). High temperature or humidity may impair the characteristics of the battery and/or the corrosion of its surface..
- Do not store / expose the battery to the direct sunshine, places exposed to rain, excessive heat, in proximity of radiators or water heaters.
- Store the batteries in a well ventilated and dry environment, ideally enclosed in a protective package.
- When storing, keep the temperature within the range specified for the specific cell.
- Do not stack the cardboard boxes with the batteries. Stacking could lead to deformation of the batteries in the lower layers and subsequent electrolyte leakage.
- For any further transport / manipulation choose such a packaging material and method of packing that would prevent from creating an unintentional electric contact and corrosion of the terminals, assuring protection from the elements and any mechanical damage.
- Manipulate with the boxes considerately. Coarse manipulation may cause short circuit or damage.
- Keep a proper circulation of supplies, keep the FIFO system.
- Store the batteries charged and take a measure of their voltage every 1 month. If the value is near its minimum, recharge the battery.
- Operate the batteries under supervision or under a constant monitoring by a protection and control system. Avoid overcharging and total discharging

5. Recycling the batteries and cells, mandatory information required by law, declarations of conformity

a) regarding the way of providing take-back or separated collection; for this purpose, in a way available for the end user, the producer publishes a current list of take-back and separated collection locations with at least a name of the place and its address:

Take-back and separated collection location i4wifi a.s., Průmyslová 11, Prague 10

b) regarding any negative effects of materials used in the batteries to the environment and human health:

The batteries and cells contain chemicals that may have negative effects to the environment and human health.

c) regarding the meaning of the symbol for take-back and separated collection and regarding the meaning of marking:



WARNING

THIS IS THE SYMBOL FOR TAKE-BACK OR SEPARATED COLLECTION.
DO NOT THROW THE BATTERIES TO HOUSEHOLD WASTE, THEY NEED TO BE
RETUNDED AT A TAKE-BACK AND SEPARATED COLLECTION LOCATION.



WARNING

BEFORE THE FIRST RIDE CHECK THE TIGHTNESS OF ALL BOLTS
AND FUNCTIONALITY OF ALL SYSTEMS INCLUDING WHEEL BRAKES.

Declaration of Conformity:

GWL Power Ltd., VAT ID: CZ683335258 as an entity authorized by the producer for EU, thus proclaims that the device conforms to basic requirements and any other relevant provisions of Decree-Law No 17/2003 Coll. establishing technical requirements for low-voltage electric devices (or LOW VOLTAGE DIRECTIVE 2006/95/EC). This statement is issued on the basis of documents presented by the producer



www.EVBIKE.cz

Importer: GWL Power Ltd., VAT ID: CZ683335258