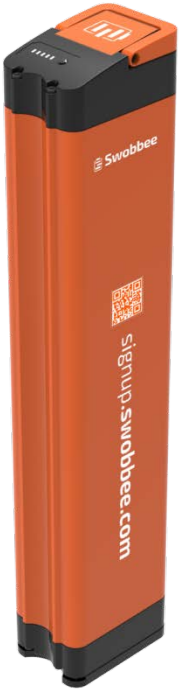
OPERATING MANUAL

i SERIES BATTERY TP6132 48 V



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1. Safety

Please read these operating instructions carefully before installation or starting any work. These contain important information on the proper functioning of the power battery TRITEK TP6132 48V. (“TRITEK TP6132 48V“referred to as ”TP6132”).

This manual is intended for all users of the TP6132 batteries and the charger as well as for trained electricians, who are qualified for commissioning.

Local regulations must be adhered to. Regional regulations should be observed and can supersede the User Manual.

Safe keeping of Manual

This manual should be kept in a safe place near the TP6132 and the charger. It must always be accessible to all users and to electricians responsible for commissioning and maintenance. In the event of a change of user , the user manual must be transferred.

Limitation of Liability

Tritek does not assume any liability for any personal injury, damage to property, damage to the product or consequential damage caused by non-observance of this manual, improper use of the product, repairs or other work carried out on the product by non-qualified electricians. Unauthorized modifications or changes to the product are hereby prohibited.

1.1 Hazard classification

⚠ DANGER

The signal word indicates a danger with a **high** degree of risk which will result in death or serious injury if not avoided.

⚠ WARNING

The signal word indicates a danger with a **medium** level of risk which will result in death or serious injury if not avoided.

⚠ CAUTION

The signal word indicates a danger with a **low** level of risk which could result in a minor or moderate injury if not avoided.

NOTE

A note in the sense of this instruction is important information about the product or the respective part of the instruction to which special attention is to be drawn.

⚠ WARNING

When using this product, basic precautions should always be followed, including the following:

1.2 Safety Instructions for using the TP6132

• The TP6132 may only be used as intended in these operating instructions.

• The TP6132 must not be charged outdoors.

• Opening the TP6132 voids the warranty.

• The TP6132 must not be opened under any circumstances! There is a potential risk due to high currents.

WARNING - Risk of Fire - No User Serviceable Parts.

• Protect the TP6132 from fire, high heat and also from extended direct exposure to sunlight.

• Manipulating or greasing the contacts is prohibited.

• The TP6132 must be placed out of reach by children.

• No objects may be placed on the TP6132.

• Before inserting the TP6132 into the receptacle on the system, the electrical contacts of the battery must be clean and dry.

• The user is prohibited from carrying out unauthorized repairs to the TP6132.

• The electrical contacts inside the connection socket of the TP6132 must not be touched.

• The TP6132 may only be charged with an original charger or one approved by the manufacturer.

• Make sure that the cables of the charger are not bent and do not touch any hot surfaces or sharp edges.

• When charging the TP6132, ensure sufficient ventilation.

• Never charge or use a damaged TP6132.

• Do not charge the TP6132 unattended.

Shipment of Lithium Batteries – international rules for shipping batteries must be adhered to.

Also please adhere to additional local rules for handling, storing, charging LiFePo batteries.

⚠ WARNING

Only use this product within following temperature limits:

Charge: 1° C to 45 ° C

Discharge: -20 ° C to 55 ° C

Storage≤3 months: -20 ° C to 40 ° C

Storage≤6 months: -10 ° C to 25 ° C

Relative humidity: ≤65%

Recommended storage: 25 ° C to 30 ° C

⚠ CAUTION

If you want to clean the TP6132, make sure that it is not connected to the charger or to any system.

1.3 Fire Protection Instructions

⚠ DANGER

IMPORTANT: Do not attempt to extinguish fires involving lithium batteries yourself. The course of such fires cannot be predicted, and risk of personal injury cannot be excluded.

In the event of a fire involving the battery TRITEK i Series TP6132 respectively, comply with applicable regulations. Notify the fire service and draw the attention of fire service personnel to the following dangerous goods:UN3480, lithium-ion battery, Class 9.

2. General Instructions for Handling

2.1 1st Step getting started

NOTE

Delivered batteries are in transportation mode.

Step 1. Press the button for 3 seconds to bring the battery out of transportation mode.

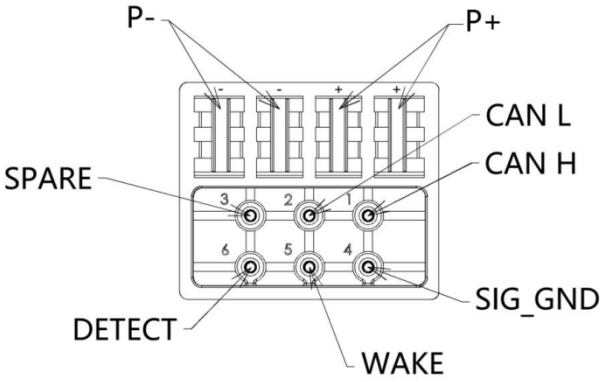
Step 2. Then fully recharge the battery to 100% for the accurate charge indication.

2.2 Components

No	Part name
1	Power switch
2	Battery
3	Latch
4	Slipping guide
5	M5 screw*2
6	M5 lock nut

2.3 Illustration

This shows a TP6132 from every angle:



➢ Charging/Discharging cable-Battery female connector

端口标号 Port label	功能描述 Functional description
P+	电池充放电正极 Positive pole for battery charging and discharging
P-	电池充放电负极 Negative pole for battery charging and discharging
CAN H	CAN 通讯信号高 CAN communication signal High
CAN L	CAN 通讯信号低 CAN communication signal Low
SIG_GND	信号地 Signal Ground
WAKE	电池开关机 Wake up battery,Shutdown battery
DETECT	充电器插入电池检测 Detecting charger insertion into battery
SPARE	备用 Spare

2.4 General Instructions for Handling

NOTE

Push the TP6132 evenly with both hands and never with force into the holder on the bike.

2.5 Communication with Drive Systems / Electrical Consumers

The TP6132 can be used in the CAN bus version, and the simple version without CAN bus communication. For CAN bus version, it requires a software configuration adapted to the consumer. Such a consumer can be, among other things, a motor system. The individual configuration is done after consultation with before delivery of the battery.

2.6 Operation

2.6.1 CAN bus Version

This battery can only be used in combination with motor systems/consumers programmed for these beforehand. Switching on and off depends on the system used. If you want to read off the charge status during operation, press the button on the charge status display again.

2.7 Display Indication

Charging	LED Status
SOC≤20%	The 1st white LED flashing
20%<SOC≤40%	The 2nd white led flashing, 1st LED is on
40%<SOC≤60%	The 3rd LED white led flashing, 1st, 2nd led are on
60%<SOC≤80%	The 4th LED white led flashing, 1st ,2nd, 3rd led are on
80%<SOC≤ 100%	The 5th LED white led flashing, 1st ,2nd, 3rd,4th led are on

LED	SOC Status	LED Status
▯	SOC≤20%	1 white led on
▯ ▯	20%<SOC≤40%	2 white led on
▯ ▯ ▯	40%<SOC≤60%	3 white led on
▯ ▯ ▯ ▯	60%<SOC≤80%	4 white led on
▯ ▯ ▯ ▯ ▯	80%<SOC≤100%	5 white led on

⚠ WARNING

Fire hazard due to damage to the battery by using screws that are too long

Only use the screws provided by the manufacturer or the ISO 7380-1 button head screws included in the scope of delivery to attach the Base.

Using screws that are too long can damage the battery in the Range Extender.

2.8 Installing the Battery in the Application

Installation steps

Step 1:Install the slipping guide, fasten the slipping guide on the E-bike with 2 pcs M5 screw, then Fasten the upper part with M5 lock nut.

Install the Battery (2) into the slipping guide. There is a latch in the battery, please be sure to install it in place.

Connect the female connector on the battery with male connector on the E-bike.

Lock the battery
Method 1: Press the power switch for 3s;
Method 2: Connect Bluetooth, lock the battery through APP.

2.9 TRANSPORT AND STORAGE

Outdoor temperatures below +5° C can temporarily reduce the capacity of the TP6132 by up to 10 %. At low outside temperatures, the battery should therefore be stored at room temperature and only connected to the system shortly before use.

Long term Storage Requirements

1. If the battery has to be storied for a long time, the environmental condition should be: Temperature:0 ~ 25º C,Humidity: 65±20％RH 2. We recommend that batteries be charged about once per half a year to prevent over discharge.

Transport Requirements

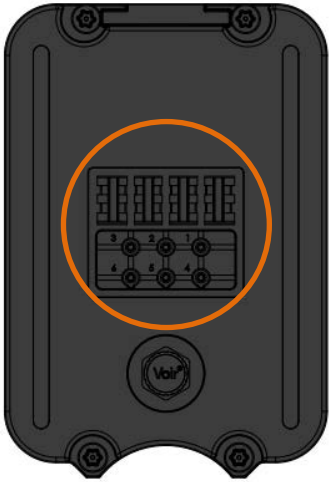
1. Care shall be taken to avoid collision and knocking during transportation. It is strictly forbidden to put corrosive articles such as acid and alkali together. 2. The parts and components in the box must be fixed reliably and meet the requirements of highway transportation.

3 Charging Process and Charge Level Display

3.1 Charging Process with Charging station

Put battery into charging station slot.

For charging station, please refer to charging station user manual.



3.2 Display of Charging status

To see the charge status, refer to the flash LED light.
To set the charge level indicator on a new battery, it must first be fully Charged.

To charge a TP6132, a charger with a maximum charger voltage corresponding to the battery must be used. An original charger of one approved by must be used

⚠ WARNING

Only use this product within following temperature limits:

Charge: 1° C to 45 ° C

Discharge: -20 ° C to 55 ° C

Storage≤3 months: -20 ° C to 40 ° C

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4 Technical Features - TP6132

Nominal Voltage	48 V DC
Capacity	15 Ah
Energy	720 Wh
Cell Interconnection	15S / 1P
Charging Current	7.5 A
Peak Charging	18A for 3S
Continuous Discharge Current	20 A
Peak Discharge Current	21～30A for 15S 31～40A for 3S
CAN bus	Yes
IoT Compatible	Yes
Cell Type	3.2 V / 15 Ah LiFePO4
Charge-/ Discharge cycles at 80% remaining Capacity	> 2.500
Charge-/ Discharge cycles at 70% remaining capacity	> 3.000
Weight	6.38 kg
Dimensions (mm)	L 513.3 x B 110.5 x H 75mm
Casing	Anodized aluminium tube, Plastic side cover
Charging Temperature	1 ° F to +45 °C
Discharge Temperature	-20 ° F to +45 °C

5 Care Instructions

⚠ CAUTION

- An empty TP6132 must be fully charged within 24 hours!
- Regardless of use, the TP6132 must be fully charged after 4 weeks at the latest!
- If you want to clean the TP6132, make sure it is neither connected to a charger nor to an electrical consumer.
- If you want to clean the charger, first disconnect the power connection by pulling the mains plug out of the power socket!
- Damage would cause to the battery, if the cover the battery male connector is not covered by the cap when the battery is taken out of the slip-in cage.
- The inside of the electrical connection socket of the TP6132 should be cleaned exclusively by expert personnel or by the manufacturer Tritek.
- Do not use aggressive cleaners or solvents such as acetone.
- Please use a soft, clean, and lint-free cloth.

6 DISPOSAL

⚠ CAUTION

Rechargeable batteries and old batteries of e-bikes do not belong in the household waste.
They could ignite and for this reason it is mandatory to dispose of them properly. Used batteries can be returned free of charge.
Help us to recycle.

6.1 General information / disposal instructions

The TP6132 is highly efficient and long-lasting lithium-ion batteries. They can be recharged countless times and, depending on the use, only reach the end of their service life after years. However, the service life heavily depends on how

regularly they are used and how they are handled. Correct handling can positively influence the service life. At the end of the service life, the battery is not defective; it simply does not provide the desired performance any more. Consequently, the capacity of the battery decreases by a certain percentage from year to year. This reduces the range that can be achieved with a single charge. When the battery is considered to be unusable is therefore also partly a matter of personal preference.

6.1.1 Recycling

Once a battery has reached the end of its service life, it must be disposed of appropriately. If you have defective or worn-out batteries, please contact a specialist dealer, who will handle the proper disposal. The return as well as the recycling is always free of charge for the users. Proper recycling saves resources and valuable raw materials are returned to the material cycle. Never remove the battery yourself; always have it removed by a specialist dealer.

6.2 Responsibility

The battery manufacturer is responsible for the recycling in China. However, as soon as the application crosses country borders, the importer (in countries other than consequently the application manufacturer or dealer) automatically becomes the manufacturer. In other countries, we provide the application manufacturers with the best possible support for this task.

6.3 Disposal

Chargers, accessories, and packaging must be recycled in an environmentally friendly manner. Do not dispose of chargers in the household waste.

6.3.1 Only for EU countries:

In accordance with EU Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, chargers that are no longer in working order must be collected separately and recycled in an environmentally friendly manner.

Subject to change without notice

7 Electrical tests

The electrical test of the TP6132 takes place at the manufacturer Tritek where all relevant data such as capacity, end-of-charge voltage, quiescent voltage and the uniformity of the individual cell voltages are checked.

8 FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement.

To maintain compliance with FCC's RF exposure guidelines, the distance must be at least 20 cm between the radiator and your body, and fully supported by the operating and installation.

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