

MANUAL / SAFETY NOTES

FOR AKKU VISION TEST TOWER

INHALT

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E-Bike Vision ist eine Marke der Akku Vision GmbH

ANLEITUNG VOR GEBRAUCH SORGFÄLTIG LESEN!

This manual is integral part of the product. It contains important information and safety notes. Keep it in range and give it away with the product to third party.

Introduction

We are glad, that you choose the Akku Vision Test Tower.

Please take some time to read this manual carefully. It contains detailed information about the handling of the Akku Vision Test Tower, of your battery, its functions and its care, as well as the usage of the E-Bike Vision fast charger. For further questions, do not hesitate to contact your dealer or get in contact with us via our homepage. Enjoy your new Akku Vision Test Tower and thank you for your confidence.

Your Akku Vision Team

Disclaimer

The Akku Vision GmbH assumes no responsibility for any loss, damages or costs arising from incorrect use and operation of the product, or related.

The obligation to pay any compensation, regardless of the legal reason, is limited to the directly involved E-Bike Vision products invoiced value, as far as this is permitted by law. This does not apply, if a liability according to binding legal rules due to intent or gross negligencem has to be respected. Furthermore, the Akku Vision GmbH assumes no responsibility for the completeness and accuracy of the documents that come with the battery, due to its different distribution channels.

Guarantee

For our battery products, we accept the legally applicable guarantee beyond a 24 months warranty. To qualify for the 24 months guarantee, submission of the purchase receipt is required.

Please contact your dealer from whom you purchased the product, in guarantee cases.

Excluded from the guarantee are malfunctions caused by:

- improper operations, e.g. overheating, incorrect connection, short-circuit or reverse polarity, immersion in water, cleaning with high pressure or steam cleaners, deep discharge, wrong polarity or drop
- use of non-approved accessories by the Akku Vision GmbH
- accidental or deliberate damages
- defectives due to normal tear
- operation outside the technical specifications
- damages that will not appear directly on the device, for which we assume the guarantee
- grease the contacts with contact spray or similar
- changes / repairs / modifications / installations or upgrades that have not be performed by the Akku Vision service center → use only our service center for repairs
- optical damages that justify no functional damages or which can be remedied by cleaning
- the costs for rental batteries

Removal of the performace label leads to loss of warranty claim.

CE declaration of conformity

The evaluation of the device was carried out by European harmonized directives. You therefore have a product that is related to its construction meets the safety objectives of the European Community to the safe operation of equipment. The detailed CE declaration of conformity can be obtained from our service center.



Technical data

| | |
|------------|--------------------|
| Dimensions | 145 x 125 x 213 mm |
| Weight | ~ 2500 g |

The following components are included with the purchase of the device:

- Akku Vision Test Tower
- USB C to USB A cable
- Power supply 12 V
- Software

Care and storage

- Use only a soft cloth and a little water or a neutral detergent for cleaning
- Never clean with a high pressure or steam cleaner!
- Do not immerse in any liquids!
- Do not use any cleaning agents as gasoline, alcohol or other liquids.
- Abrasive cleaning agents can lead to detachment of the painting, discoloration, deformation, scratches or similar defects.
- Humidity should be in the range of 0 to 80 %.

Safety notes

- Don't make any changes on the Akku Vision Test Tower. Especially, consider that you are not allowed to open the device, or rather modify it, otherwise you lose your warranty claim.
- Read these operating instructions carefully before use! Improper handling of Lithium-ion Batteries may cause fire, explosion or chemical danger. Check battery manufacturer instructions.
- Only discharge Li-Ion batteries. Do not discharge lead-acid, NiCd, NiMh or primary cells!
- Do not use battery and/or charger for any other purposes.
- Connect the device to a suitable mains supply, only. Disconnect the device from mains and the battery pack if it is not in use for a longer time.
- Children must not play with the device. The appliance cleaning and user maintenance must not be made by children without supervision.
- The device is designed for usage in a damp-free, dry and ventilated environment.
- Do not expose the device to rain or hot conditions. Don't cover the charger.
- Please keep the device clean and dry.
- Do not discharge overheated battery packs. Battery packs must be at ambient temperature before discharging. Stop the discharging process if the battery gets too hot during discharging (>55-60°C).
- Do not use the charger if there are any signs of damage. Do not open the charger or carry repairs. Repairs must be carried from the E-Bike Vision service center, only.
- Do not leave the device unattended during operation.
- Do not touch the Akku Vision Test Tower and the battery with wet hands.
- Do not connect the Akku Vision Test Tower and battery continuously.
- Lithium-ion batteries must only be discharged on a noncombustible underlay. As well as the device.
- Discharge Lithium-ion batteries only under supervision!

Common safety notes for E-Bike Vision Battery

Please read this manual carefully! Please consider the safety notes!

- EBV E-Bike Batteries are no toys. Keep them away from children!
- Don't change anything on the battery. Especially, consider that you are not allowed to open the battery, or rather modify it, otherwise you lose your warranty claim.
- By mishandling (heating, e.g. solar irradiation or store on radiators, open fire, dipping into water, cleaning with pressure washer or steam cleaner, short circuit, over charging, deep discharging, inverse polarity or dropping) or situations, that lead to not-proper operation, that can hurt people or catch the battery fire.
- EBV E-Bike Batteries are products which may not release any substances under normal and reasonably foreseeable conditions of use.
- However, should any liquids or gas eject from the battery, avoid any contact with it and also do not breathe it. If contact occurs randomly, wash the affected skin with water.
- In case of burns or on contact of the eyes with one of these fluids or by respiratory irritation, please consult a doctor!
- In extreme cases, seal batteries airtight and add dry sand, chalk powder (CaCO₃) or vermiculite.
- Do not use damaged batteries or chargers. In any doubt, contact your dealer.
- Do not use battery and/or charger for other purposes.
- You must use EBV E-Bike Batteries only in the designated eBikes.
- Use only the appropriate chargers.
- Contacts should not be treated with lubricants.
- The battery connectors at the eBike must be dry and clean before contacting!
- The covers of charge/discharge connectors must be replaced immediately on loss, otherwise warranty void.

→ That way, you do have the maximum safety!

Safety notes for charging

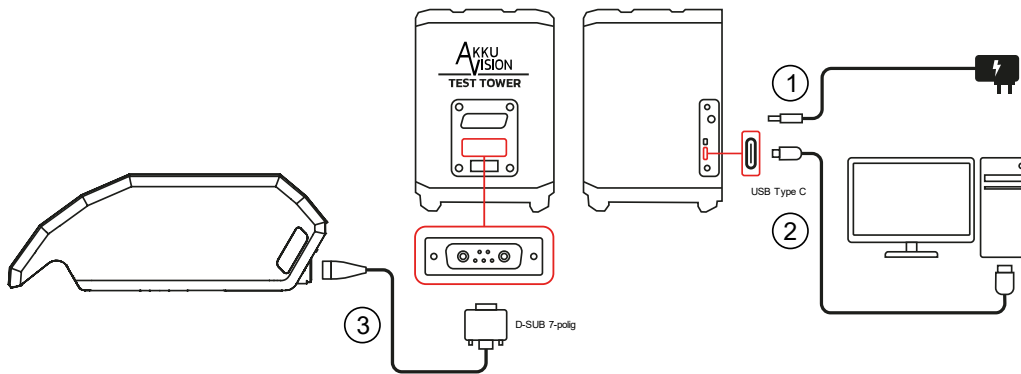
Please pay particular attention to the following points when charging:

- Connect the charger only to a suitable mains supply.
- Do not charge NiCd, NiMh or primary cells!
- Use the charger only with the appropriate EBV E-Bike Batteries of Akku Vision!
- When not using for a longer period, disconnect the mains supply and also connected batteries.
- The charging time varies depending on the battery's capacity and charger type.
- Do not charge the battery below 0° and not above 45° C. The battery management system will not allow to start the charging process.
- Please charge your E-Bike Vision Battery only under supervision and on a non-combustible surface (both battery and charger).
- The charger is designed for operation in ventilated, dry and dust-free environment. Never expose to rain or extreme heat. Allow adequate air circulation.
- Do not cover the charger, nor the battery.
- Ensure that that the plugs and sockets of the charger are not damp or contaminated.
- Do not touch plugs and sockets of the charger with wet hands.
- Do not try to convert or disassemble the charger.
- Before the charger is connected to the mains, please ensure that line voltage matches to the supply voltage of the charger. The charger's needed voltage is indicated on its nameplate on the backside.
- A charger with a damaged power supply cord or plug must not be connected to the electrical grid and must promptly replaced or repaired by the E-Bike service center.
- Penetration of water and moisture into the charger must be avoided in any case. Should this have happened, power off the charger (by turning off the fuse) immediately. Disconnect the charger from the mains and let it be checked by the Akku Vision service center.
- A sudden temperature change from cold to hot, there could be condensation water on and in the charger. In this case, wait for connecting to the mains until the charger is as warm as the room. Try to avoid this case by storing the charger where you use it.

For maximum life of your battery, charge it only within 10° and 30° C temperature range.

The commissioning

The Akku Vision Test Tower is a versatile battery test device that reads and analyses batteries of the own brand E-Bike Vision and compatible batteries.



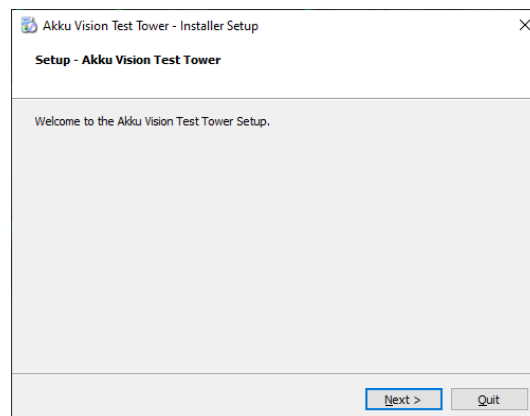
1. Connect the Akku Vision Test Tower to the mains via the 12 V power supply unit.
2. Connect your PC to the Akku Vision Test Tower via the USB cable
3. Connect the Akku Vision Test Tower to the battery using the adapter cable (please make sure that you use the adapter cable that matches the battery).

Operation

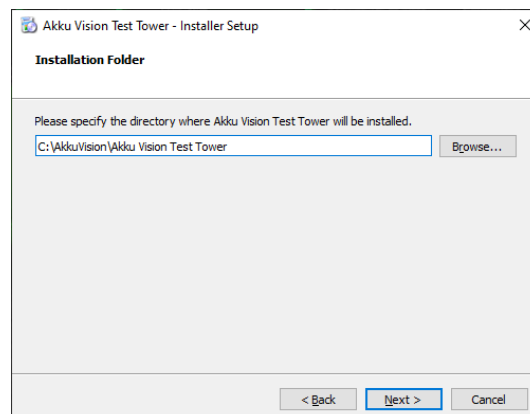
Software installation

Please download the installation file from our website and start the installation by double-clicking on the file. **If you download a ZIP folder when downloading, please ensure that the files are unpacked in the same folder.** Accept the drivers required for installation.

After opening, the setup assistant will guide you through the installation process. Click on "Next".

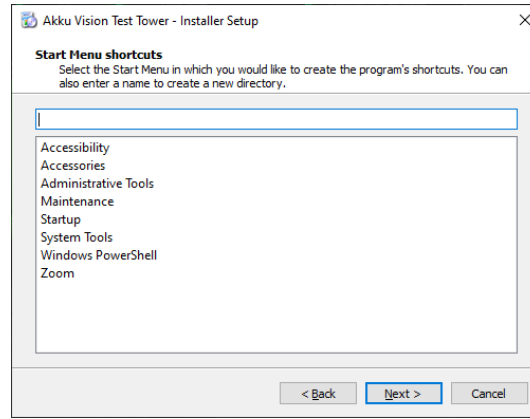


Select a directory in which the software is to be installed and continue with "Next".



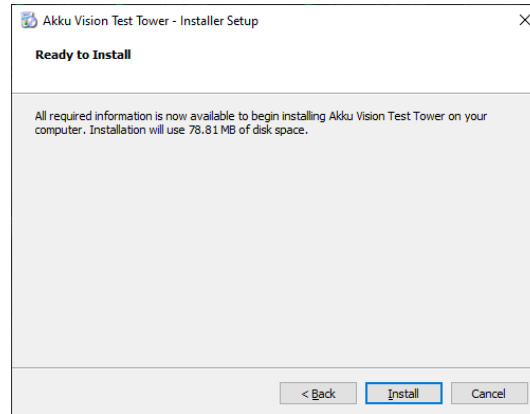
If necessary, create a shortcut in your start menu.

Confirm with "Next".



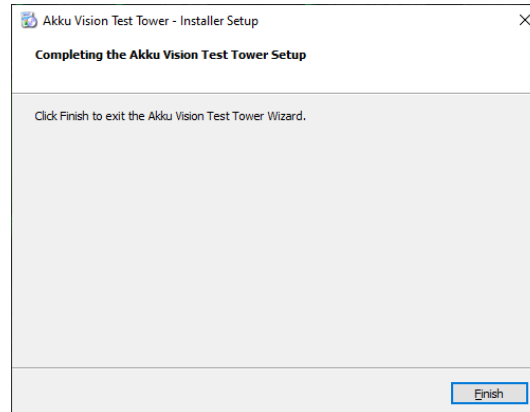
After the setup has been completed, the installation can be started.

Click on "Install"



The installation is now complete, you can close the setup assistant.

Click on "Finish"



Now open the newly installed Akku Vision Test Tower app, which you will find on your desktop or in the Start menu.



Registration and Login

The first time you run the software, the registration form will appear.

Please fill in the data and click on "Initiate registration process".

Initial User Registration

This initial registration is required to ensure valid usage of the program, collection of user specific data and enables fetching of most recent software versions.

Go to Login
No registration

First name
Name*
Valid eMail address*
Phone number
Company
City code
Street, No
Name of city

→ Initiate Registration Process

Enter here the 6 digit code from the registration email!

→ Finalize Registration

Enter a password and repeat the entry.

Click on "OK"

Password assignment

Password
Password

OK Cancel

After the password has been assigned, a message with the access key will be sent to the e-mail address provided.

Enter the access key from the e-mail in the field provided.

Click on "Finalize registration"

Initial User Registration

This initial registration is required to ensure valid usage of the program, collection of user specific data and enables fetching of most recent software versions.

Go to Login
No registration

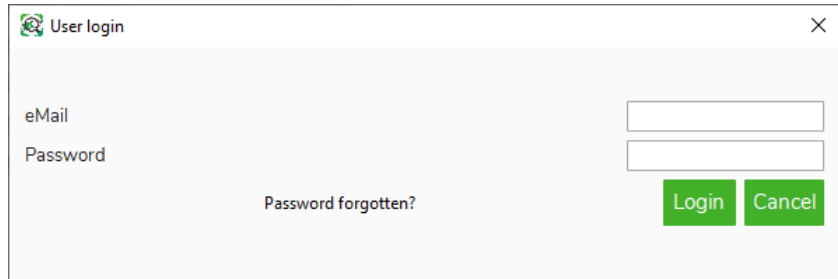
First name
Name* Mustermann
Valid eMail address* info@akkuvision.de
Phone number
Company Akku Vision GmbH
City code
Street, No
Name of city

→ Initiate Registration Process

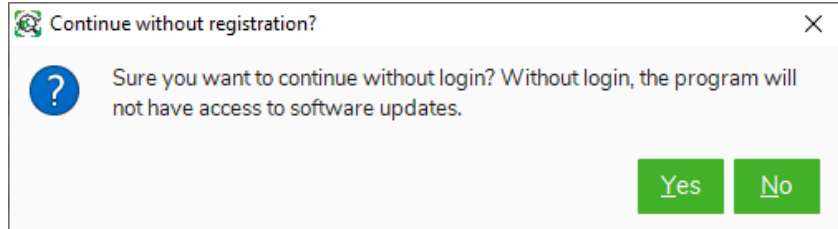
Enter here the 6 digit code from the registration email!

→ Finalize Registration

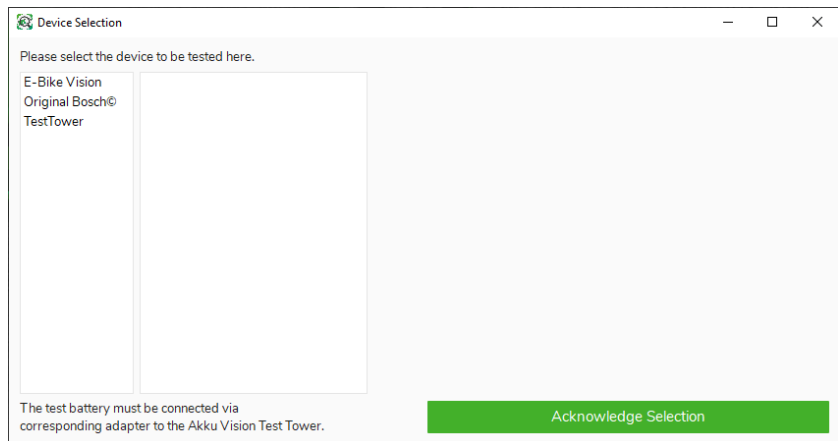
The next time you start, you will log in using your registered e-mail address and password.



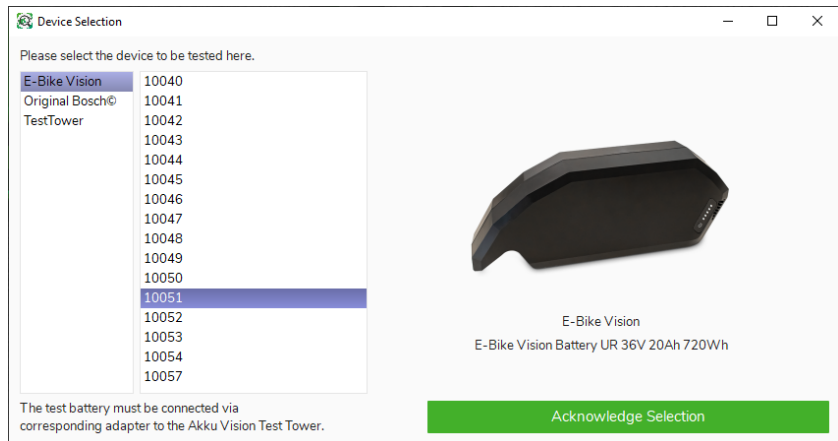
If you select "No registration", you can start the programme without entering your data.



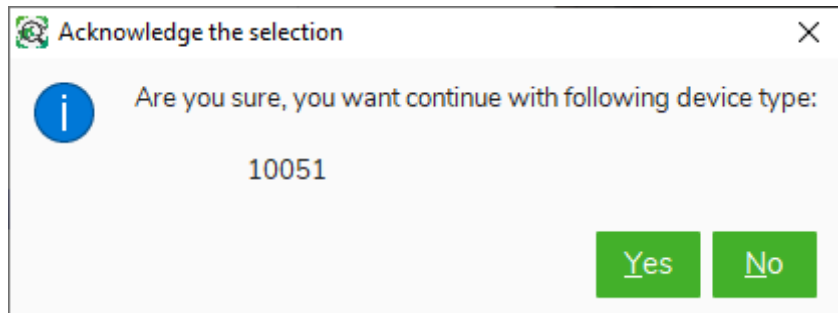
In the device selection you have an overview of the available categories.



Select your battery and the main Diagnostic screen opens.



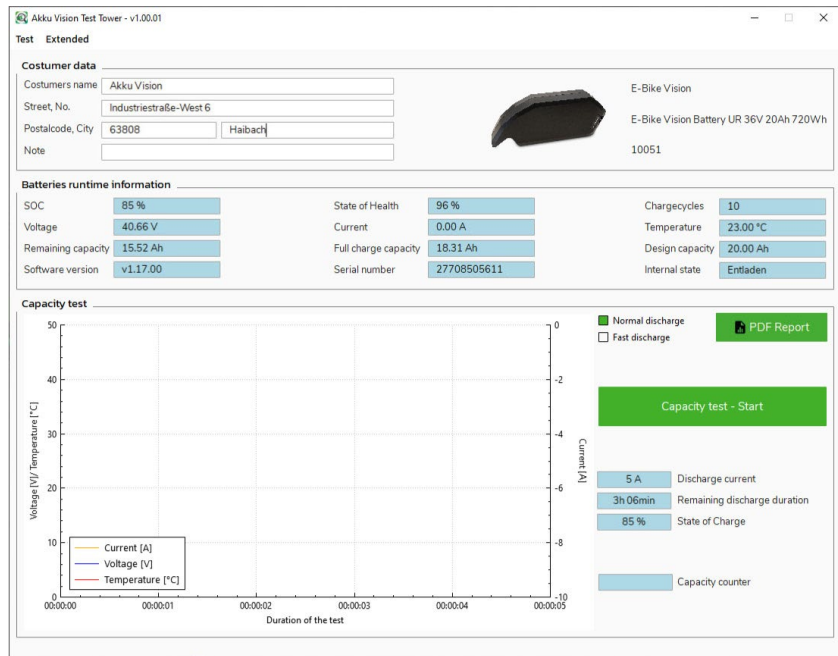
Confirm the selection with "Yes"



In the diagnostic view, you can add the customer data for the battery.

The following data can be read out via the application:

- Charge level
- State of Health (SOH)
- Charging cycles
- Voltage
- Current
- Temperature
- Remaining capacity
- Full charge capacity
- Design capacity
- Software version
- Serial number
- Internal status

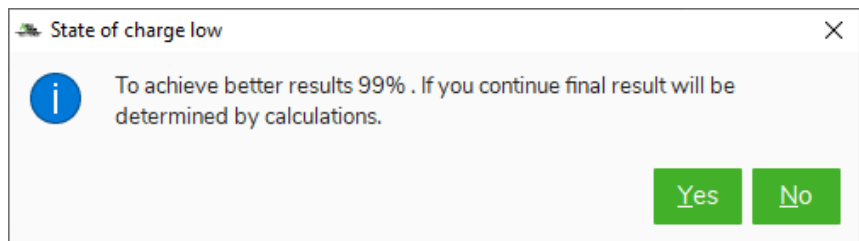


Via the "Test" tab, you can select the device type again.

Via the "Advanced" tab, you can change the language, view and change your user data (only after registration and login) or search for programme updates.

Click on "Capacity test - Start" to start the discharge process.

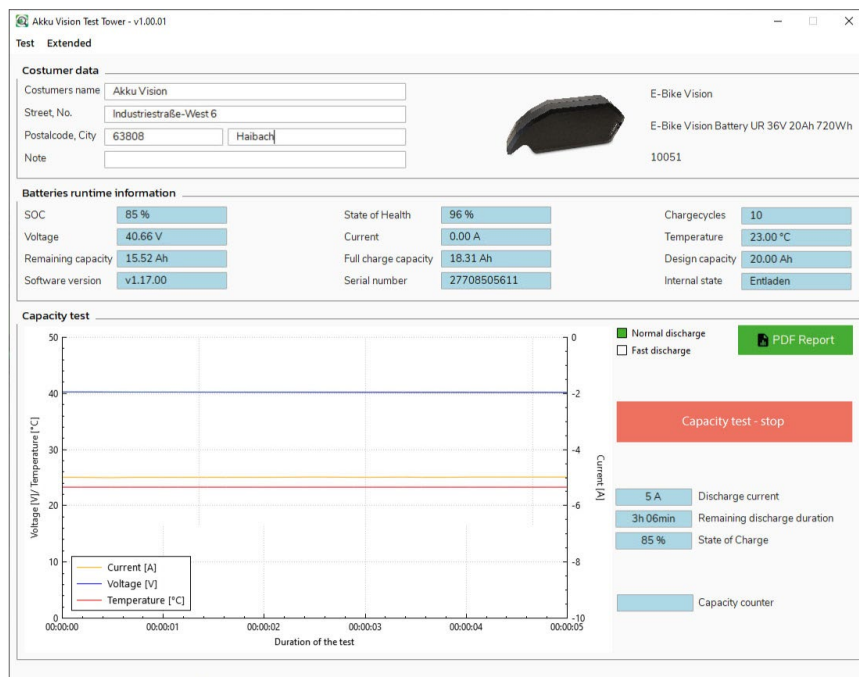
If the battery is not fully charged, you will receive a notification.



You can record the discharge process via the graph.

If you want to stop the process, click on "Capacity Test - Stop".

If you want to output a report, click on "PDF Report".



Generate PDF-report

After you started the PDF-report, select a storage location and click on "Save".

To open the storage location, click on the folder icon. There you will find the saved PDF file.

The generated PDF file contains all information from the software and the recording from the capacity test.


PDF Report

Report im Standardverzeichnis speichern.

Report speichern unter: ...

AKKU VISION TEST TOWER

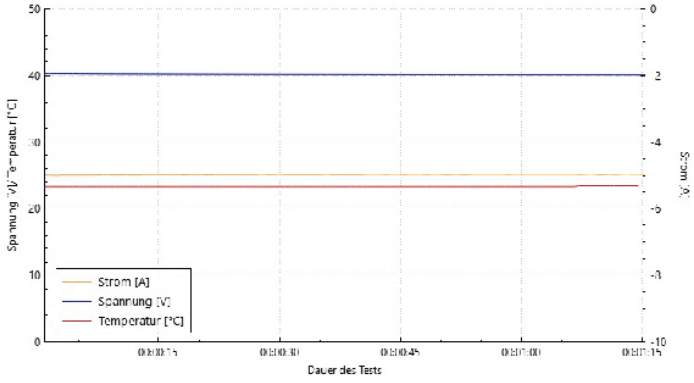
BERICHT NR. BR36-27708505611



| Kundendaten | | Batteriedaten | |
|------------------------|--------------------|-----------------------------------|--|
| Akku Vision | Hersteller | eBike Vision | |
| Industriestraße-West 6 | Bezeichnung | E-Bike Battery UR 36V 20 Ah 720Wh | |
| 63808 Haibach | Art-Nr. | 10051 | |
| | Softwareversion | v1.17.00 | |
| | SOH | 96 % | |
| | Ladezyklen | 10 | |
| | Nutzbare Kapazität | 18.31 Ah | |
| | Seriennummer | 27708505611 | |

Test Ausführung

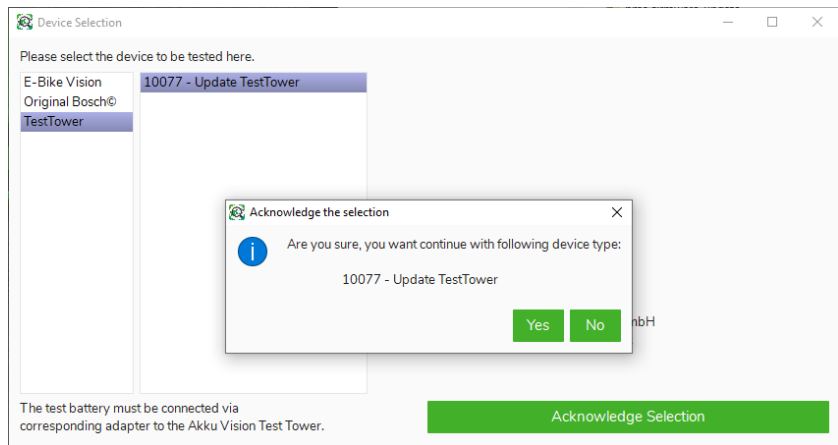
| | Start | Ende | Details | |
|----------------|----------|----------|-------------------------------|-----------|
| SOC | 85 % | 85 % | Softwareversion beim Test | v1.17.00 |
| Spannung | 40.67 V | 40.09 V | Ergebnis | No Finish |
| Rest Kapazität | 15.52 Ah | 15.42 Ah | Dauer | 1min |
| Temperatur | 23.30 °C | 23.40 °C | Geschätzte Kapazität bei 100% | 0.00 Ah |
| | | | Gemessene Kapazität | 0.10 Ah |



Datum: 08.09.2023 - 11:01 Bericht Nr. BR36-27708505611

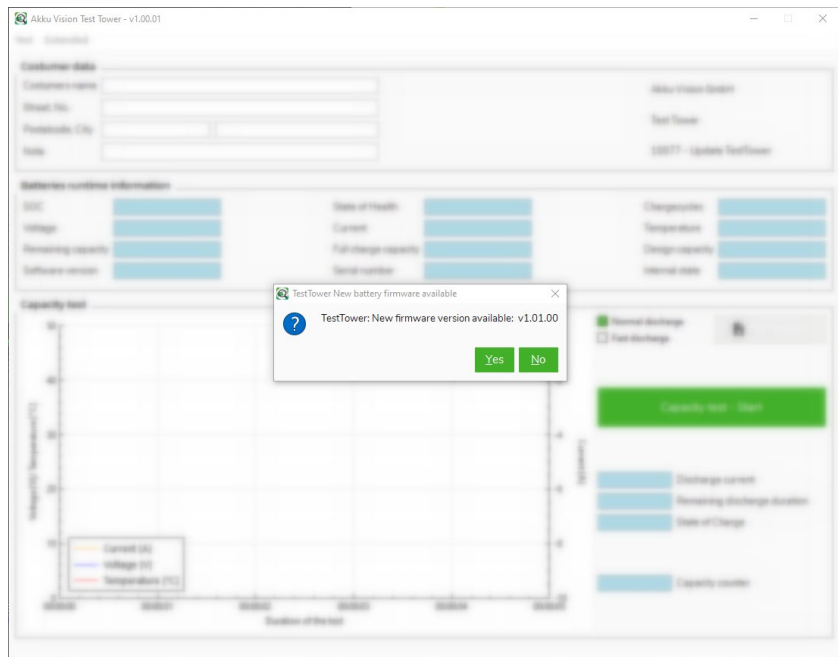
Update of the Akku Vision Test Tower

The Akku Vision Test Tower can be updated via the software. Select the device in the overview and confirm the selection.

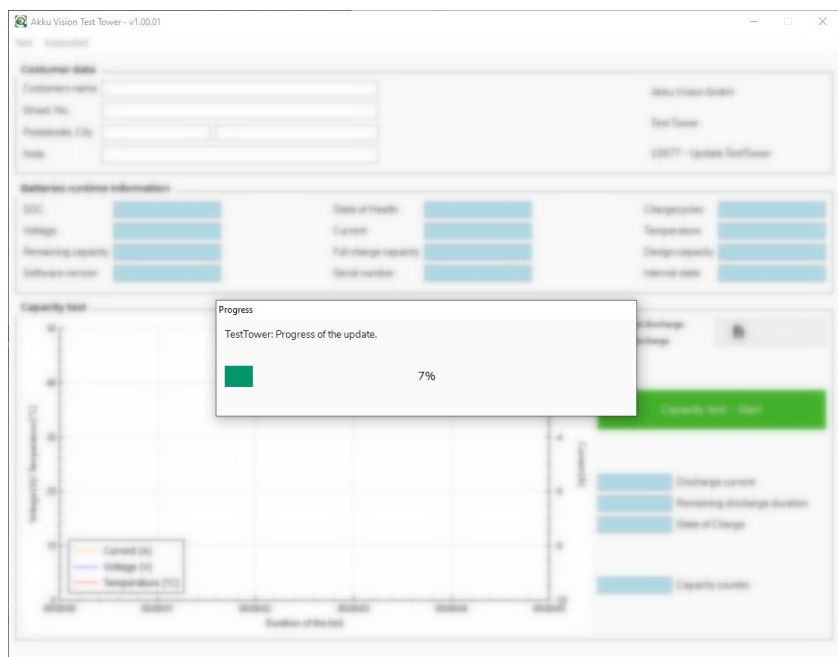


If a new firmware version is available for the Akku Vision Test Tower, a notice opens.

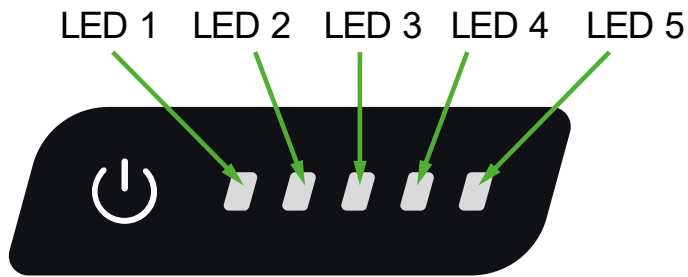
Confirm the window with "Yes" to start the update.



As soon as the update has been completed, the Akku Vision Test Tower is up to date with the latest software.



LED-view



Betätigen Sie den Ein-/Aus Taster, um das Gerät in den Standby-Modus zu versetzen.

| | |
|---|--|
| LED 1 flashing: | Software error – Update necessary |
| LED 1, 2, 3, 4 and 5 flashing: | Akku Vision Test Tower is not connected to the Software via PC |
| LED 1, 2, 3, 4 and 5 on: | Akku Vision Test Tower is connected Software via PC |
| Descending LED-view from LED 5 to LED 1: | Discharging test running |

Maintenance and servicing

If your drive system can not be activated, please check the contacts of the discharge plug to make sure that they are clean, straight and undamaged and that there is a safe contact between battery and connector box.

If the drive system can still not be activated, please try to charge your battery.

If charging does not start, please check the polarity of the charge plug.

Please test the battery by pushing the capacity indicator button.

Is the power cord of the charger connected properly and performs the wallet socket?

If the battery is damaged, defective or exits any liquids or smell? Please do not use your E-Bike Vision Battery further and contact your dealer or our service center.

Disposal

Electrical equipment marked with the cancelled waste bin symbol must not be discarded in the standard household waste; instead it must be taken to a suitable specialist disposal system.

