

Installation & Maintenance



revision: April 2018

Installation and start-up operations

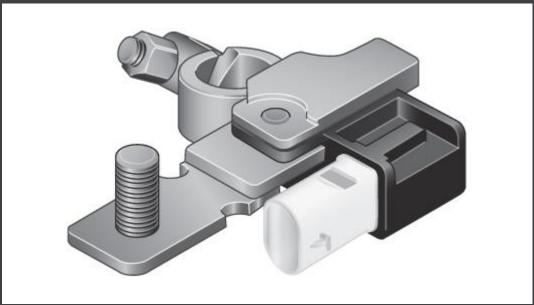
Every LITE \ddagger BLOX model (LB13XX / LB19XX / LB26XX) is extensively engineered \ddagger build by hand in Germany for use in various automotive applications on rough environment.

Get in contact with our customer service for specific advises to fit your own powersports vehicle.

Our LITE&BLOX are ready to substitute the OEM battery 1:1 in most common vehicles & have to be adjusted by a qualified workshop on first start-up for smooth operation with maximum shelf life. Since our LITE&BLOX come with less capacity than the respective OEM battery, make sure to use our charger LB100I for maintenance in case of extended energy consumption (ECU mapping, etc.) and visit our online shop for extended mounting peripherals: www.en.liteblox.de/shop/

The intelligent power electronics implemented in our LITE ₹BLOX is actively protecting the premium li-ion battery cells from permanent over- (>15,2V) and undervoltage (<12,4V). For use in vehicles with IBS "Intelligent Battery Sensor" (additional device attached to the negative battery pole terminal – see picture), the LITE ₹BLOX has to be coded to your vehicle self-use first start to prevent from malfunction or permanent damage as following.

Please respect, that in vehicles with IBS (mostly along with "Start-Stop" function) only our models LB19XX / LB26XX can be used, due to an extended load onto to battery in operation, while for applications with brake regeneration ("Efficient Dynamics", etc.), only our flagship model LB26XX can be used - to prevent malfunction or permanent damage of the battery cells in long term use.



HELLA technical data bus system IBS (Credit: www.hella.com)

The following recommendation on the battery ECU settings may vary for different applications and are therefore supplied without liability:

Battery type: AGM Max. voltage: 14,6V

Min. voltage: 13,2V (only if available)

ETN / BEM - code: no adjustment / keep existing values

Capacity: Ah-value for the respective LITE BLOX model (22 / 38 / 54Ah)

Please make sure to visit our LITE &BLOX online-FAQ for extended information on the technology behind our products: www.en.liteblox.de/frequently-asked-questions-lithium-car-battery/

Operation via smartphone app

Our latest LITE BLOX GEN3 / GEN4 models are equipped with a wireless interface to monitor your battery status via app "LITE BLOX remote" for a status overview & extended maintenance:

Android-Version \rightarrow <u>https://play.google.com/store/apps/details?id=de.liteblox.litebloxreader2</u> *IOS-Version* \rightarrow <u>https://itunes.apple.com/de/app/liteblox-remote/id1343292009</u>

A.) evaluating data

- 1. open the "LITEBLOX remote" app (activate Bluetooth-function beforehand)
- 2. press "Scan" & connect to your LITE \$\forall BLOX listed (within a radius of ~10 feet)
- 3. enter the 3-digit password (see sticker attached to your LITE BLOX)
- 4. evaluate all present & past parameters and see relevant events in the "History" section
- 5. press "Send Data" to transmit all data to our customer service via email for full evaluation and receive a specific feedback

 All LITE ₹BLOX can be adapted to your specific vehicle to optimized the lifespan of the battery cells, based on data evaluated past use over the "expert mode" section in the app menu (upper left corner after start-up access for selected service partners only).

B.) remote operation

The intelligent power electronics implemented in our latest LITE BLOX GEN4 model allows an extended operation via smartphone app with two key features (only use when engine is turned OFF!)

→ I.K.O.S. – Intelligent Kill-Off-Switch (activate / deactivate via "Battery ON / OFF" button)

Effective autonomous disconnection due to misuse, malfunction or overload (current / voltage / temperature) – can be reactivated via app, using the "overwrite" function Make sure to erase the cause of malfunction permanently beforehand (turn off the respective peripheral consumer before reactivating in discharge protection mode, etc.).

In addition, your LITE&BLOX can be disconnected permanently via smartphone on emergency/crash or for extended sitting periods (similar to the common FIA kill-off switch)

In I.K.O.S. mode, the hypothetic sitting time should be between >300days -depending on the respective battery model- due to the marginal self-discharge of the li-ion battery cells.

→ A.V.A.T. – Active Vehicle Anti Theft (activate / deactivate via "Antitheft ON / OFF" button)

Extended innovative surveillance mode in which the LITE &BLOX will instantly shut down the full electrical load -including starter motor- at theft attempt, while all peripheral consumers such as sensors, Keyless-Go, Alarm, etc. are still provided with energy during longer sitting periods Please keep in mind, that for vehicles with "Keyless-Go" function the doors locks as well as the whole ignition process is only verified by the car key software, which quite easily can be hacked these days!

Please make sure to get in contact with our customer service on any uncertainties or malfunction: