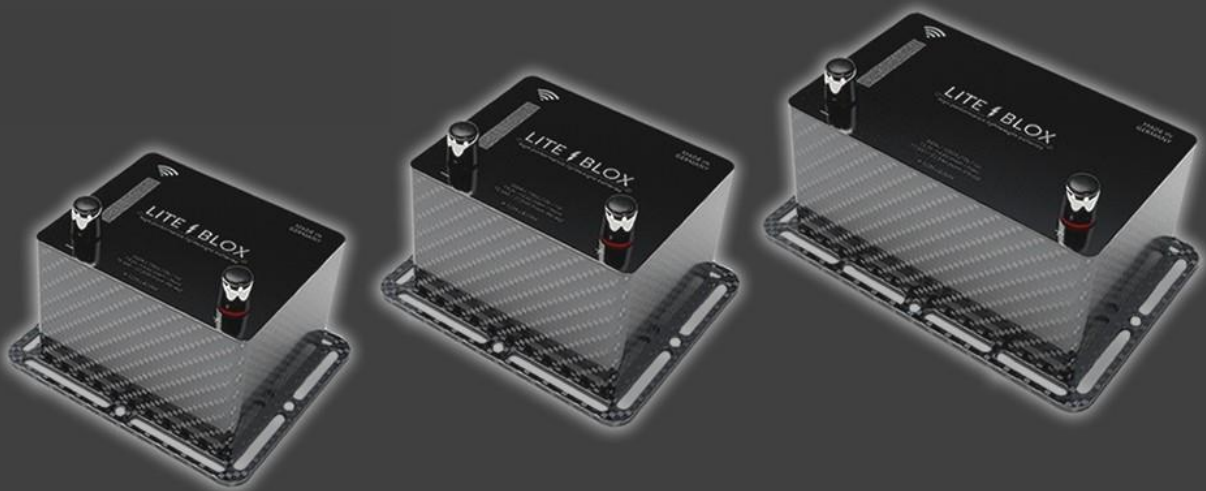


# LITE BLOX

high performance lightweight batteries

## Installation & Maintenance



revision: May 2020

# Installation & Maintenance LITEBLOX

Our LITEBLOX models are developed for a replacement of the standard heavy starter battery in modern cars, but need to be treated as following before first use:

The intelligent power electronics in the current [LITEBLOX LBXXXX\(MS\)](#) models (SN: #EXXX-FXXX) effectively protects against permanent overvoltage (> 15.2V) or undervoltage (<12.4V) plus disconnects permanently when leaving the intended working space (voltage / current / temperature) as soon as vehicles is parked, in order to avoid permanent harm to the battery cells. For extended energy consumption while sitting (for ex. alarm system), only our special [LB100I](#) charger with maintenance function should be used, while on the dyno or in professional motorsport the [LB300I](#) with increased charging power is recommended.

The LITEBLOX can be exchanged 1: 1 with the standard Pb or AGM battery, using our [specific adapter brackets](#) for a plug'n'play installation.

Latest vehicles (from model year 2010) are equipped with an intelligent battery sensor (IBS) evaluating battery data from a tiny device on the negative pole of the starter battery. Before first start, the LITEBLOX must therefore be trained to the cars ECU by a specialist workshop using a vehicle specific tester (PIWIS / ODB / CAN...), to ensure smooth operation in the intended working space at all times.

*Due to the increased load on the starter battery, only the model LB20XX (application in motorsport) / LB28XX (application in everyday life) can be used in current vehicles & if brake energy recovery is activated only our top model LB28XX(MS) can be used!*

Depending on the vehicle manufacturer, the corresponding specialist workshop must use the respective testing device to adjust the settings stored for the starter battery before first use as follows:  
*Recommended thresholds for commissioning (no guarantee, since specific to the vehicle / manufacturer)*

- Battery capacity: **smallest Ah possible**
- Battery technology: **AGM**
- Scanner code: to be incremented - for ex. 2222222222222222 → **3333333333333333**
- Battery number: to be incremented - for ex. 99161104052 → **99161104053**
- Max. voltage: **14,6V (only if possible)**
- Min. voltage: **12,6V (only if possible)**

Batteriewechsel							
Tragen Sie bitte die Kodierwerte (11 Zeichen) ein. Schreiben mit [F8]. Zurück mit [F11].							
Übersicht	Erweiterte Identifikationen	Fehlerspeicher	Istwerte Schalteingänge	Stellglieder Prüfungen	Wartung Instandsetzung	Codierung Programmierung	Protokolldienste
Steuergerät	Codierwert			Wert		Geändert	
CAN/CAN-Gateway A4.2	Batteriekapazität			40		🔗	
	Batterietechnologie			AGM		🔗	
	Scannercode			3333333333333333		🔗	
	Batterieteilenummer			99161104052		🔗	

More background information on the commissioning, use and maintenance of our LITEBLOX in our extended user manual at: [https://en.liteblox.de/media/pdf/LITEBLOX\\_manual.pdf](https://en.liteblox.de/media/pdf/LITEBLOX_manual.pdf)

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

## Operating the „LITE⚡BLOX remote“ app

Our latest LITE⚡BLOX models (SN: #DXXX-FXXX) are equipped with a wireless interface to evaluate your battery status via app for a status overview & extended maintenance:

download Android → <https://play.google.com/store/apps/details?id=de.liteblox.litebloxreader2>

download IOS → <https://itunes.apple.com/de/app/liteblox-remote/id1343292009>

extended information to use the app → [https://en.liteblox.de/media/pdf/LITEBLOX\\_manual.pdf](https://en.liteblox.de/media/pdf/LITEBLOX_manual.pdf)

### using the app:

1. open the "LITE⚡BLOX remote" app (activate Bluetooth & GPS beforehand)
2. press "Scan" & connect to your LITE⚡BLOX listed (within a radius of max. 2m)
3. enter password (see sticker attached to your LITE⚡BLOX & on the inside of the box)

### remote operation:

The intelligent power electronics implemented in our latest LITE⚡BLOX models (SN: #EXXX-FXXX) allows extended operation via smartphone app with two key features: *(only use when engine is turned OFF!)*

#### → I.K.O.S. – Intelligent Kill-Operation-Switch

*deactivate / activate via "Battery OFF / ON" button (left / right)*

Effective autonomous disconnection due to misuse, malfunction or overload (current / voltage / temperature) – can be reactivated via app, using the "charge 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

*deactivate / activate via "Antitheft OFF / ON" button (left / right)*

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!*