

Background:

Ligo batteries are the ultimate travel battery, as they can be taken on an airplane with your carry-on luggage anywhere in the world. Bike Friday was able to purchase these batteries from GRIN Technologies of Canada from 2017 to 2022. Due to pandemic related computer chip shortages, GRIN has been unable to produce these batteries, but they are working on an updated design using different computer chips, which may be available in 2023. The following contains information that used to be in our e-assist manuals. More information can be found at:

<https://ebikes.ca/product-info/grin-products/ligo-batteries.html>

Installing and using Ligo Batteries:

Step 1. Place batteries in the battery bag under saddle.

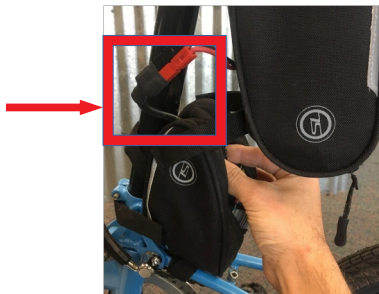


NOTE: Several bag options are available, depending on the number of LiGo batteries your system includes.

- *Connect modular batteries together and insert block of batteries into bag.*
- *Secure bag with velcro strap through saddle rails and around seatpost.*

Step 2. Connect red and black Anderson connectors from battery(s) to controller box.

Store extra cable length inside battery and/or controller bag.



Step 3. Power on batteries (See next session for details)

Battery Information:

Grin Technologies LiGo Battery Details:

Grin's modular LiGo battery was born in response to the massive transportation restrictions placed on larger lithium e-bike packs. Batteries under 100 watt-hours are largely exempted from the dangerous goods shipping restrictions and are even allowed aboard passenger aircraft with your carry-on luggage when disconnected and powered off.

Connecting LiGo Battery Modules:



Each battery module has two pairs of +/- leads on them, which are terminated in Anderson Powerpole Connectors. That allows you to string any number of packs together in parallel, with two connectors left open. One connects to the controller and the other could run lights or act as a charging port.

Turning on a LiGo Battery:



- For each battery, press and hold the button until the first LED goes green, then immediately release the button.
- The green LEDs light up all the way and show the battery's current charge level.
- Then, one LED will show a green "heartbeat" pulse for approximately 20 minutes to confirm that the battery is on.

Turning off a LiGo Battery:



- Press and hold the button until the first LED goes red, then immediately release the button.
- The battery should be turned off for shipping, airline travel, or extended storage.

Charging LiGo Batteries:



- Connect the charger to one of the open sets of Anderson connectors, and to 100V-240V supply.
- Green LEDs on batteries will flash while charging, then turn off when charging is complete.
- Battery(s) can remain connected to controller while charging; use the extra open connector as the charge port.

Note: The battery may be connected to a computer or phone via bluetooth pairing to check battery usage history, adjust BMS settings, and upgrade the LiGo firmware. Contact Grin Technologies at info@ebikes.ca for information about the necessary software to connect your device.

For more information on Ligo batteries, go to Grin's website at:

<https://ebikes.ca/product-info/grin-products/ligo-batteries.html>