

EB Lithium Cluster Installation and Parameter Adjustment

Parts List:

- EB Lithium Cluster
- 10ft 5-pin Digital Cable
- LCD to Cluster CAN Adapter Harness
- Backup Camera (Cluster PN: A-3120 ONLY)
- 18.5mm Hole Saw (Cluster PN: A-3120 ONLY)

1. Turn the key switch to the OFF position and depress the power button on the battery to turn it off.
2. Remove the factory cluster from the dash and unplug the 2 connections at the back of the cluster.

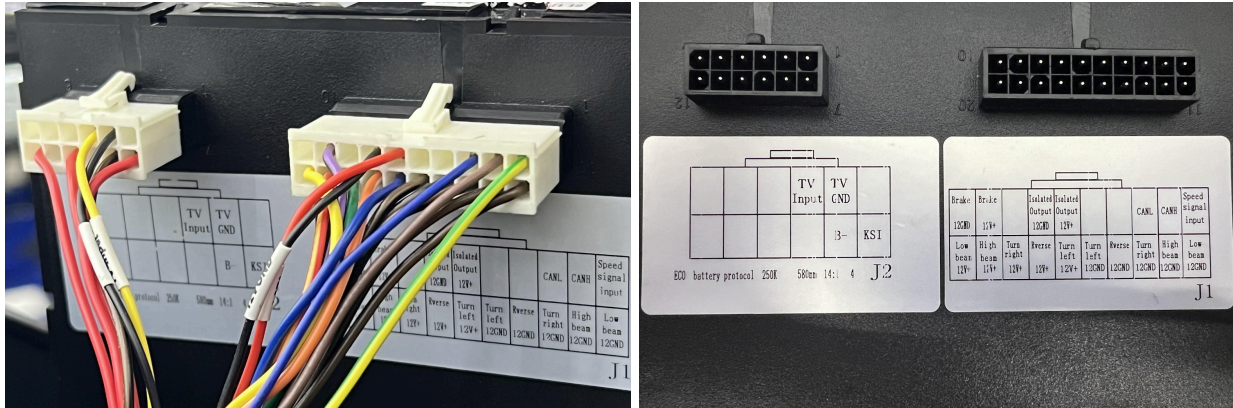
NOTE: Inspect the 20-pin connector.

- If your cart's harness **does not** have any wires in pin 2 or pin 3 (CANH & CANL), proceed to step 3.

- If your cart's harness **does** already have wires in the CANL and CANH slots and you're **installing a backup camera**, proceed to step 6.

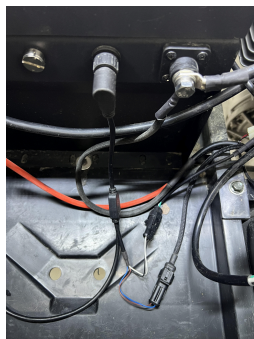
- If your cart's harness **does** already have wires in the CANL and CANH slots and you're **not installing a backup camera**, carefully insert the cart's 12-pin and 20-pin connector into the EB Lithium cluster and insert the cluster into the dash. Installation is now complete.

3. Route the 5-pin Digital Cable from the round 5-pin communication port on the battery (reference photo on page 2) to behind the dash at the cluster's location. Ensure the cable is routed in a manner so that the cable won't break or chafe. Secure with zip ties.
4. Attach the Cluster CAN Adapter Harness to the square 4 pin connector on the Digital Cable by lining up the locking tabs on the white connectors.
5. The Cluster CAN Adapter Harness wires will insert into the back of the cart's 20-pin cluster harness connector. As shown below, the blue wire will insert into the CANL slot, and the brown wire into the CANH slot. The pin will click into place when properly seated. Ensure a secure connection by lightly tugging on the wire. Refer to the pin-out sticker on the back of your cluster and the photos below.



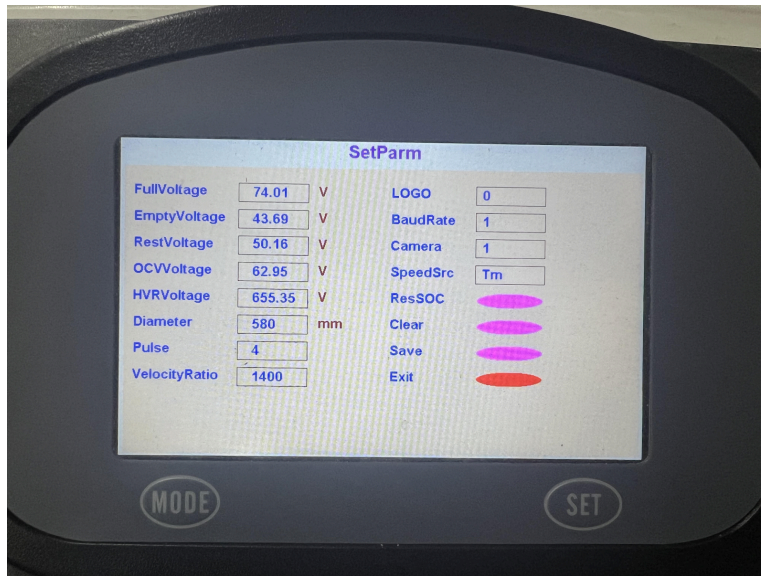
If your cluster does not have backup camera capability, proceed to step 8. If your cluster does have backup camera capability, proceed to step 6.

6. Choose a location for the camera, ensuring that the camera's wiring harness can properly reach the back of the cluster. An 18.5mm hole saw is included.
7. The camera's wires will insert into the back of the cart's 12-pin and 20-pin wiring harness connectors.
In the 12-pin connector, the wire labeled TV Input will insert into the TV Input slot, and the wire labeled TV GND will insert into the TV GND slot.
In the 20-pin connector, the wire labeled 12V+ will insert into the Isolated Output 12V+ slot, and the wire labeled 12V GND will insert into the Isolated Output 12GND slot. The pin will click into place when properly seated. Ensure a secure connection by lightly tugging on the wire. Refer to the pin-out sticker on the back of the cluster and the photo above.
8. Carefully insert the 12-pin and 20-pin connectors into the rear of the cluster by lining up the locking tabs, ensuring not to damage or break the pins. Secure the cluster into the dash.
9. Referencing the photo below, attach the 90° 5-pin connector to the corresponding port on the battery, ensuring not to break or damage the pins.



Installation of the cluster is now complete.

EB Cluster (pn A-3120) Parameter Adjustment



- To enter this menu, with the key on, press and hold down the MODE button until this white screen appears, approximately 2-3 seconds.
- Press (long press) the MODE button to scroll. Change values with the MODE and SET button (quick press).
- Be sure to SAVE any changes made, then navigate to EXIT. After saving and exiting, turn the key off and back on for the changes to apply.

PID	Description
FullVoltage	DON'T ADJUST (parameter is for non-EcoBattery batteries)
EmptyVoltage	DON'T ADJUST (parameter is for non-EcoBattery batteries)
RestVoltage	DON'T ADJUST (parameter is for non-EcoBattery batteries)
OCVVoltage	DON'T ADJUST (parameter is for non-EcoBattery batteries)
HVRVoltage	DON'T ADJUST (parameter is for non-EcoBattery batteries)
Diameter	Tire diameter in millimeters
Pulse	Speed pulse value (number of pulses per 1 motor revolution)
VelocityRatio	Gear ratio (ex. 1400 = 14:1, 1250 = 12.5:1)
Logo	Cart manufacturer logo on startup
BaudRate	DON'T ADJUST, can result in an inoperable cluster
Camera	Backup camera enable/disable
SpeedSrc	Tm = Tercel Miles, Tk = Tercel Kilometers, Nm = Non Can Miles, Nk = Non Can Kilometers, Vm = Vivid Miles, Vk = Vivid Kilometers, Lm = Leroad Miles, Lk = Leroad Kilometers