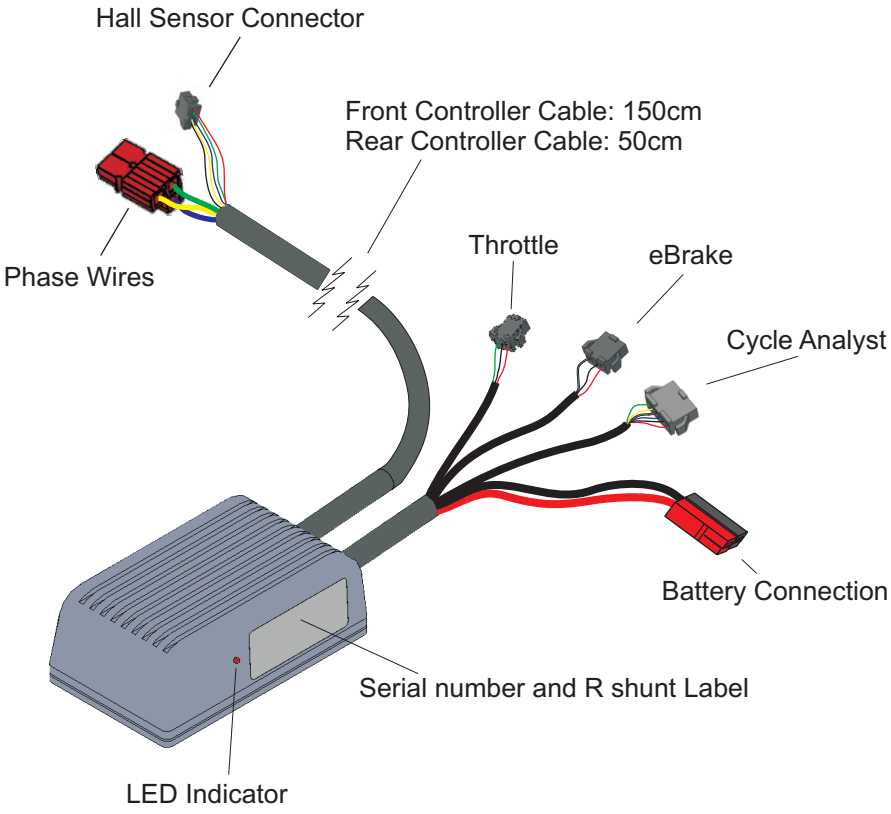
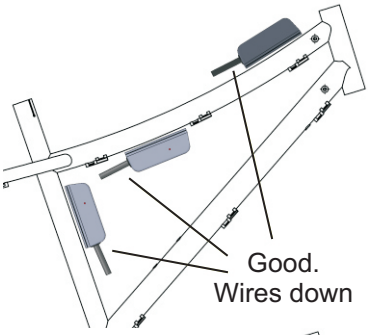
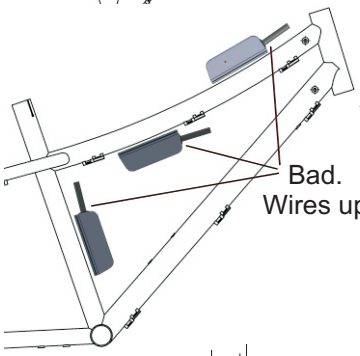
eZee Controller
Installation Guide

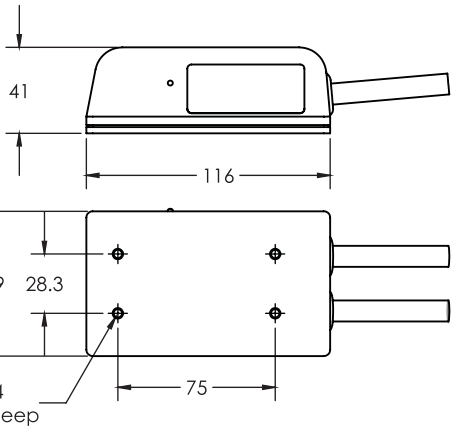


Controller Orientation and Mounting

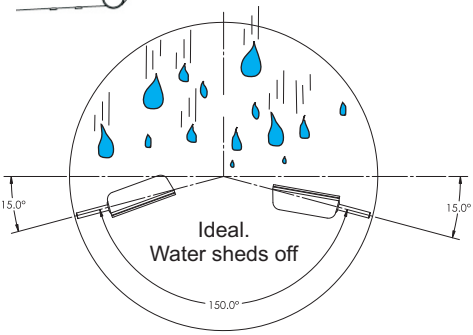
There is a good amount of flexibility as to where an eZee controller may be mounted. However, it is important to orient the controller such that the wires are facing down as water can potentially enter via the wire entry/exit and cause water damage that is not covered under warranty.



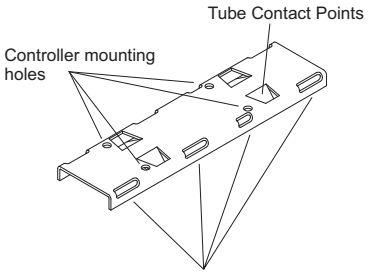


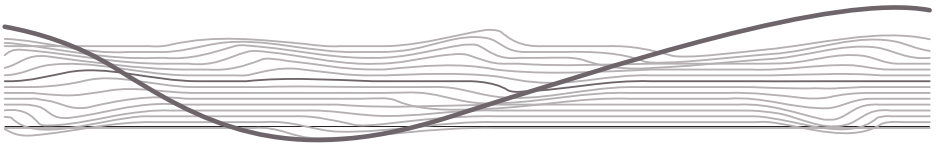


The eZee controller has 4 mounting holes (M4 thread) on the back side. Mount the included stainless-steel bracket for round tube installations or use the 4 holes to attach to a custom mounting solution.



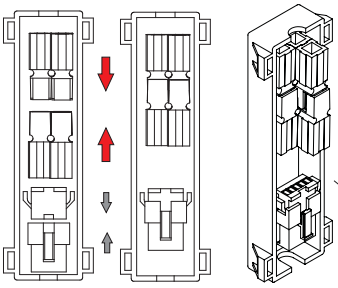
Keep the wires exiting the controller below horizontal.





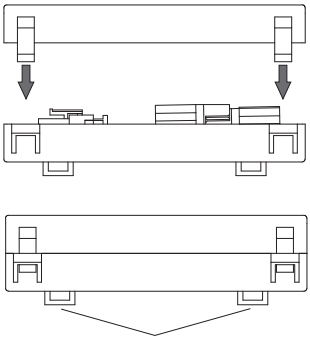
Connector Box

The included eZee connector box is effective at keeping the motor phase connections and the hall sensor signal connections free of debris and help to prevent corrosion. It is recommended that the box be installed over the connectors as follows.



Place the phase and hall sensor connectors inside the bottom of the box and connect them such that the two connectors are staggered. The wires should be long enough to facilitate this without binding.

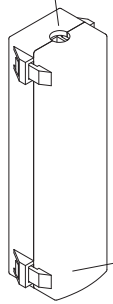
Hall + Phase Staggered
Anderson in 'L' shape



Close the connector box with the snap hooks. Secure the box to the frame or fork. Try to align it so that the central hole is pointing up, and the slot hole is pointing down, to drain.

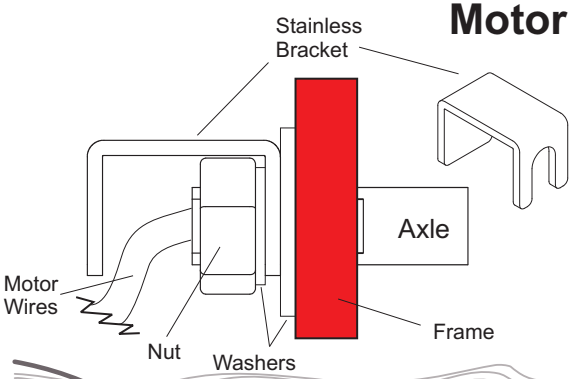
Use Cable-Tie to fasten to frame or fork

Round hole pointing upwards



Slot hole (hidden)

Motor Axle Protector



The motor kit includes a stainless steel wire protector bracket. It is prudent to install this to protect the wires exiting the motor axle from damage.

Wire Pinout and Fault Flash Codes

Controller Specifications

Controller Current Limit	25 A
Low Voltage Cutoff	23V
Max Voltage Limit	60V
Throttle Signal	Hall Effect 1.2-3.8V
Weight	~0.6 Kg

Connector Pinouts

	Cycle Analyst: 1=Vbatt 2=Gnd 3= -Shunt 4=+Shunt 5=Hall 6=Throt
	Hall Sensor 1=Gnd 2=Yellow 3=Green 4=Blue 5=5V-Red
	Throttle: 1=5V 2=Gnd 3=Signal,1-4V
	eBrake Input: 1=5V 2=Gnd 4=Ebrake In

Fault Flash Codes

Flash Code	Description
4	Throttle did not return to <1.0V
5	Throttle connection issue – check signals for shorts to 5V+ or Gnd
6	Low Voltage Cutoff (<30V)
8	Hall sensor issue check wires and voltage
9	Phase Wire Fault – check for shorts
11	Temperature sensor Fault
12	Controller fault – contact Grin Tech
2 + 3	Controller fault – contact Grin Tech
3 + 4	Motor Stalled – cycle power
3 + 5	Phase wire disconnect under use – must be applying throttle. Check for break in cable and connectors

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