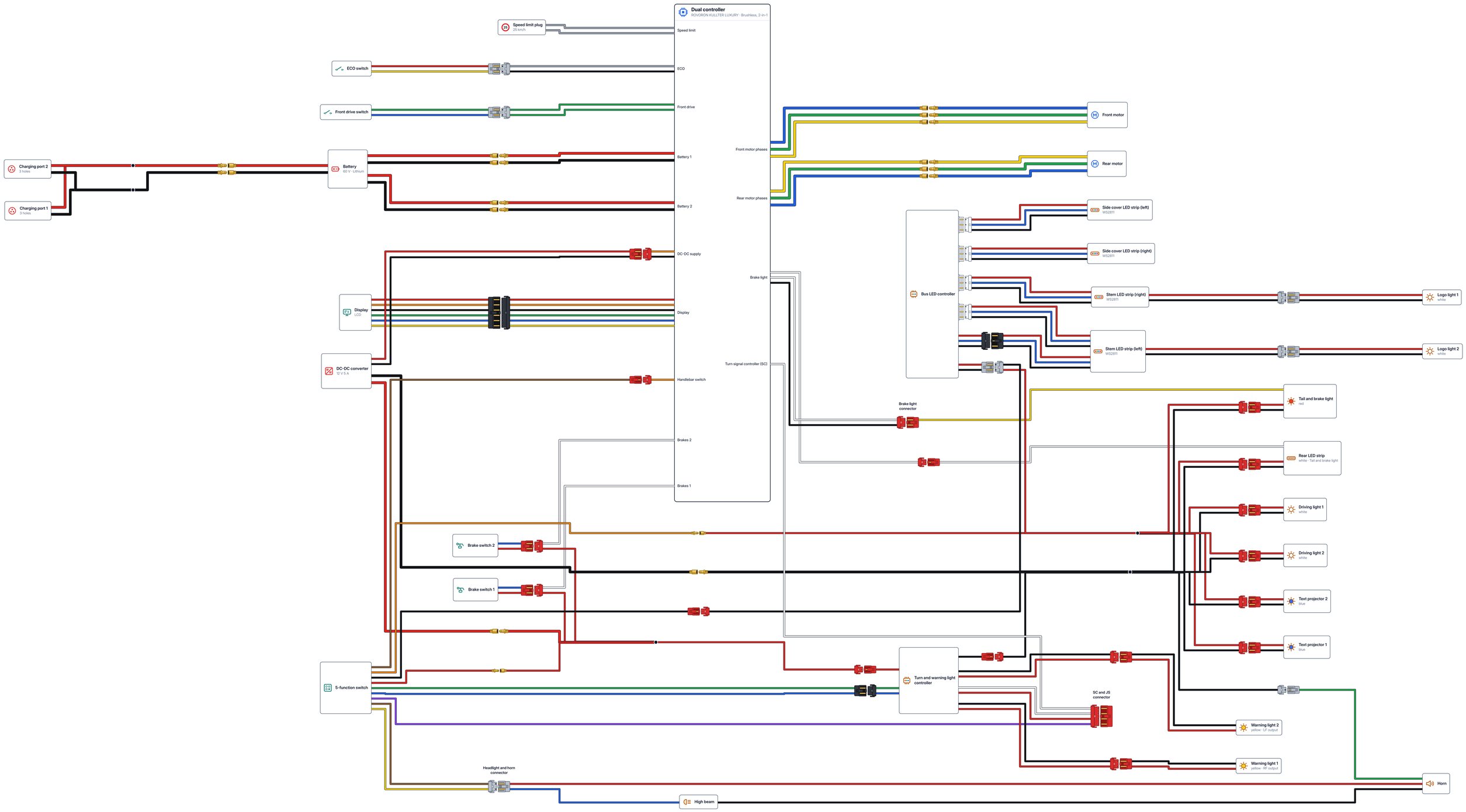
WIRING DIAGRAM

Rovoron Kullter Luxury | 60 V

FOHZSHOP.FR



WIRE COLOURS

- Black BK
- Grey GY
- White WH
- Blue BU
- Orange OG
- Yellow YE
- Brown BN
- Red RD
- Green GN
- Violet VT

CONNECTORS

Gold pins: male side. Dark sockets: female side.

- JST SM plug
- Bullet connectors
- Board header
- Splice: wires are joined at this point

NOTES

1. Page 2 of the original document, showing the Luxury version. Page 1 shows the standard Kullter, redrawn separately.
2. The DC-DC 12 V goes through a Y plug: one branch to the switch, the other to the brake switches and the turn signal controller. Through a plug splice, the orange switch wire feeds the text lights, the driving lights, both rear lights and the bus LED controller. Their grounds, and those of the switch, the horn and the turn signal controller, meet on another plug splice wired to the DC-DC OUT− output.
3. The original shows no throttle.
4. At the power plug of the bus LED controller the colours cross over: the black on pin 1 turns red towards the 12 V, the red on pin 2 turns black towards ground. Kept as drawn.
5. The output of the left stem strip (U−, OUT, U+) goes back to the 3-pin plug of the bus LED controller.
6. The switch has two brown wires of different shades: the dark one goes to the horn, the light one to the controller, where it turns orange after the red plug.
7. The headlight + leaves red then turns blue, without a connector. The headlight and horn − are joined by a thin wire, then go to ground as green.
8. The yellow warning lights are wired to the RF and LF outputs of the turn signal controller. The RR and LR outputs are not wired.
9. The red tail light only has three wires on this page. Its brake light plug has a black wire on pin 1 on the controller side, with no wire facing it on the light side.
10. The rear strip has two inputs marked 12V: the red one, wired to the lights 12 V, and the white one, wired to the controller with the brake light. Its LEDs are marked "white".
11. The original does not say on which side each brake switch is. They are numbered 1 and 2.
12. The 3-hole charging ports only use pins 1 (red) and 3 (black).

DOCUMENT

Based on the manufacturer diagram "Schéma électrique ROVORON Kullter" dated 23 August 2022.

Redrawn by FōhzShop on 1 November 2026.

Disconnect the battery before any work.

CONNECTOR PINOUT

Connector	To	Wire
Dual controller Front motor phases	**Front motor** Connectors: Bullet connectors	Blue · Motor phase Green · Motor phase Yellow · Motor phase
Dual controller Rear motor phases	**Rear motor** Connectors: Bullet connectors	Yellow · Motor phase Green · Motor phase Blue · Motor phase
Dual controller DC-DC supply	**DC-DC converter** Input Connectors: JST SM plug	2 → 2 · Orange, then red after the connector · IN+ 1 → 1 · Black · IN−
Battery Output 1	**Dual controller** Battery 1 Connectors: Bullet connectors	Red Black
Battery Output 2	**Dual controller** Battery 2 Connectors: Bullet connectors	Red Black
Charging port 1	**Splice**	1 · Red 3 · Black
Charging port 2	**Splice**	1 · Red 3 · Black
Splice	**Battery** Charge Connectors: Bullet connectors	Red Black
Display	**Dual controller** Display Connectors: JST SM plug	6 → 6 · Red 5 → 5 · Orange 4 → 4 · Black 3 → 3 · Green 2 → 2 · Blue 1 → 1 · Yellow
Speed limit plug	**Dual controller** Speed limit	Grey Grey
ECO switch	**Dual controller** ECO Connectors: JST SM plug	2 → 2 · Red, then grey after the connector 1 → 1 · Yellow, then black after the connector
Front drive switch	**Dual controller** Front drive Connectors: JST SM plug	2 → 2 · Green 1 → 1 · Blue, then green after the connector

Connector	To	Wire
Brake switch 1	**Dual controller** Brakes 1 Connectors: JST SM plug	2 → 2 · Blue, then white after the connector
Brake switch 1	**Splice** Connectors: JST SM plug	1 → 1 · Red
Brake switch 2	**Dual controller** Brakes 2 Connectors: JST SM plug	2 → 2 · Blue, then white after the connector
Brake switch 2	**Splice** Connectors: JST SM plug	1 → 1 · Red
DC-DC converter Output	**Splice** Connectors: Bullet connectors	Red · +12 V
DC-DC converter Output	**Splice** Connectors: Bullet connectors	Black · Ground
Splice	**5-function switch** Connectors: Bullet connectors	Red
Splice	**Turn and warning light controller** Power Connectors: JST SM plug	2 → 2 · Red · Supply +
Splice	**Turn and warning light controller** Power Connectors: JST SM plug	1 → 1 · Black · Supply −
5-function switch	**Splice** Connectors: Bullet connectors	Orange, then red after the connector
5-function switch	**Headlight and horn connector**	→ 1 · Brown → 2 · Yellow
5-function switch	**Splice** Connectors: JST SM plug	1 → 1 · Black
5-function switch	**Dual controller** Handlebar switch Connectors: JST SM plug	2 → 2 · Brown, then orange after the connector
5-function switch	**Turn and warning light controller** Turn signals Connectors: JST SM plug	3 → 3 · Green · Right turn signal 1 → 1 · Blue · Left turn signal
5-function switch	**SC and JS connector**	→ 1 · Violet

Connector	To	Wire
Headlight and horn connector	**Horn**	1 · Red · +
Headlight and horn connector	**High beam**	2 · Blue · LED +
High beam	**Horn**	Black · LED −
Horn	**Splice** Connectors: JST SM plug	1 → 1 · Green, then black after the connector · −
Turn and warning light controller Signal	**SC and JS connector**	→ 2 · White · SC → 1 · Red · JS
Turn and warning light controller	**Warning light 1** Connectors: JST SM plug	1 → 1 · Black · LED − 2 → 2 · Red · LED +
Turn and warning light controller	**Warning light 2** Connectors: JST SM plug	1 → 1 · Black · LED − 2 → 2 · Red · LED +
SC and JS connector	**Dual controller** Turn signal controller (SC)	2 · White
Bus LED controller Power	**Splice** Connectors: JST SM plug	1 → 1 · Black, then red after the connector
Bus LED controller Power	**Splice** Connectors: JST SM plug	2 → 2 · Red, then black after the connector
Bus LED controller RGB output 1	**Stem LED strip (left)** Input Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Bus LED controller RGB output 2	**Stem LED strip (right)** Input Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Bus LED controller RGB output 3	**Side cover LED strip (right)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Bus LED controller RGB output 4	**Side cover LED strip (left)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Stem LED strip (left) Output	**Bus LED controller** Input Connectors: JST SM plug	1 → 1 · Red · LED + 2 → 2 · Blue · LED data 3 → 3 · Black · LED −
Stem LED strip (left) Logo	**Logo light 2** Connectors: JST SM plug	2 → 2 · Red · +12 V 1 → 1 · Black · Ground

Connector	To	Wire
Stem LED strip (right) Logo	**Logo light 1** Connectors: JST SM plug	2 → 2 · Red · +12 V 1 → 1 · Black · Ground
Text projector 1	**Splice** Connectors: JST SM plug	2 → 2 · Red · LED +
Text projector 1	**Splice** Connectors: JST SM plug	1 → 1 · Black · LED −
Text projector 2	**Splice** Connectors: JST SM plug	2 → 2 · Red · LED +
Text projector 2	**Splice** Connectors: JST SM plug	1 → 1 · Black · LED −
Driving light 1	**Splice** Connectors: JST SM plug	2 → 2 · Red
Driving light 1	**Splice** Connectors: JST SM plug	1 → 1 · Black
Driving light 2	**Splice** Connectors: JST SM plug	2 → 2 · Red
Driving light 2	**Splice** Connectors: JST SM plug	1 → 1 · Black
Rear LED strip Power	**Splice** Connectors: JST SM plug	2 → 2 · Red · +12 V
Rear LED strip Power	**Splice** Connectors: JST SM plug	1 → 1 · Black · Ground
Rear LED strip Brake light	**Dual controller** Brake light Connectors: JST SM plug	2 → 2 · White · +12 V
Tail and brake light Power	**Splice** Connectors: JST SM plug	2 → 2 · Red · LED +
Tail and brake light Power	**Splice** Connectors: JST SM plug	1 → 1 · Black · LED −
Tail and brake light Brake light	**Brake light connector**	→ 2 · Yellow · LED +
Brake light connector	**Dual controller** Brake light	2 · White 1 · Black