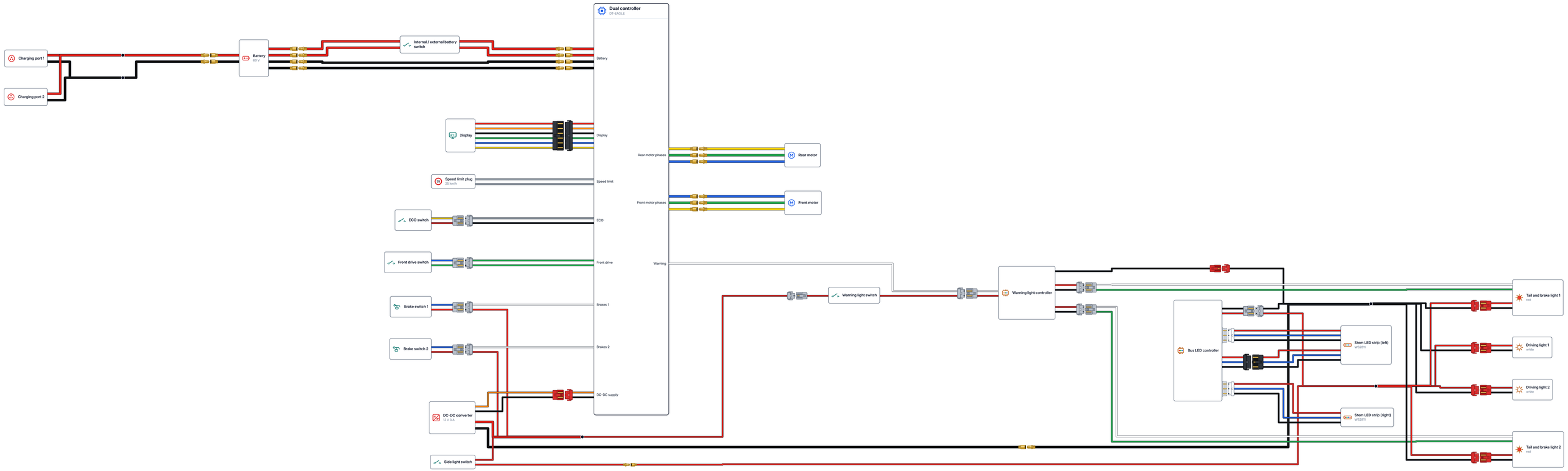
WIRING DIAGRAM

Dualtron Eagle | 60 V

FOHZSHOP.FR



WIRE COLOURS

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

CONNECTORS

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

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

NOTES

1. The manufacturer's Dualtron Raptor 2 diagram is the same drawing, line for line. Only the title (DT-RAPTOR 2 controller), the date and the file name differ.
2. The internal / external battery switch selects the battery feeding the controller. The external battery connection is not shown on the original diagram.
3. Each tail light has a second pair of wires, white and green, which turns red and black after the grey plug and reaches the LR or LF outputs of the warning light controller. On the original, the white wire leaves a lamp terminal drawn in yellow.
4. The warning light controller inputs are only marked JS and SC on the original. JS takes the warning light switch, SC the white wire from the controller. Both wires go through the same grey plug.
5. The warning light controller ground goes through the fifth red plug of the light plug row. Only pin 1 of that plug is wired.
6. The left pole strip is wired twice to the bus LED controller: its 12V, D, GND input to a white V+, DI, V- header, and its U+, OUT, U- output to the controller's black three-pin plug. Two white headers of the bus LED controller are left free.
7. Both brake switches carry the same "left / right" label on the original, which does not say which one is on the left.
8. The original diagram shows no throttle.

DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON Eagle" dated 2 April 2022.

Redrawn by FOHZSHOP 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
Battery Output	**Internal / external battery switch** Input Connectors: Bullet connectors	Red · Battery + Red · Battery +
Battery Output	**Dual controller** Battery Connectors: Bullet connectors / Bullet connectors	Black · Battery – Black · Battery –
Charging port 1	**Splice**	1 · Red · Charge + 3 · Black · Charge –
Charging port 2	**Splice**	1 · Red · Charge + 3 · Black · Charge –
Splice	**Battery** Charge Connectors: Bullet connectors	Red · Charge + Black · Charge –

Connector	To	Wire
Internal / external battery switch Output	**Dual controller** Battery Connectors: Bullet connectors	Red · Battery + Red · Battery +
Display	**Dual controller** Display Connectors: JST SM plug	Red Orange Black Green Blue Yellow
Brake switch 1	**Dual controller** Brakes 1 Connectors: JST SM plug	Blue, then white after the connector
Brake switch 1	**Splice** Connectors: JST SM plug	Red
Brake switch 2	**Dual controller** Brakes 2 Connectors: JST SM plug	Blue, then white after the connector
Brake switch 2	**Splice** Connectors: JST SM plug	Red

Connector	To	Wire
Speed limit plug	**Dual controller** Speed limit	Grey Grey
ECO switch	**Dual controller** ECO Connectors: JST SM plug	Yellow, then grey after the connector Red, then black after the connector
Front drive switch	**Dual controller** Front drive Connectors: JST SM plug	Blue, then green after the connector Green
DC-DC converter Input	**Dual controller** DC-DC supply Connectors: JST SM plug	Orange · IN+ Black · IN–
DC-DC converter Output	**Splice**	Red · +12 V
DC-DC converter Output	**Splice** Connectors: Bullet connectors	Black · Ground
Splice	**Warning light switch** Connectors: JST SM plug	Red
Side light switch	**Splice**	Red

Connector	To	Wire
Side light switch	**Splice** Connectors: Bullet connectors	Red · LED +
Warning light controller JS / SC	**Warning light switch** Connectors: JST SM plug	Red · JS
Warning light controller JS / SC	**Dual controller** Warning Connectors: JST SM plug	White · SC
Warning light controller GND	**Splice** Connectors: JST SM plug	Black · Ground
Bus LED controller Power	**Splice** Connectors: JST SM plug	Black · Ground Red · LED +
Bus LED controller ROB output 1	**Stem LED strip (right)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Bus LED controller ROB output 2	**Stem LED strip (left)** Input Connectors: Board header	Red · +12 V Blue · LED data Black · Ground

Connector	To	Wire
Driving light 1	**Splice** Connectors: JST SM plug	Red · LED + Black · Ground
Driving light 2	**Splice** Connectors: JST SM plug	Red · LED + Black · Ground
Tail and brake light 1 Input 2	**Warning light controller** LR Connectors: JST SM plug	White, then red after the connector · LED + Green, then black after the connector · LED –
Tail and brake light 1 Input 1	**Splice** Connectors: JST SM plug	Red · LED + Black · Ground
Tail and brake light 2 Input 2	**Warning light controller** LF Connectors: JST SM plug	White, then red after the connector · LED + Green, then black after the connector · LED –
Tail and brake light 2 Input 1	**Splice** Connectors: JST SM plug	Red · LED + Black · Ground
Stem LED strip (left) Output	**Bus LED controller** Connectors: JST SM plug	Red · LED + Blue · LED data Black · LED –