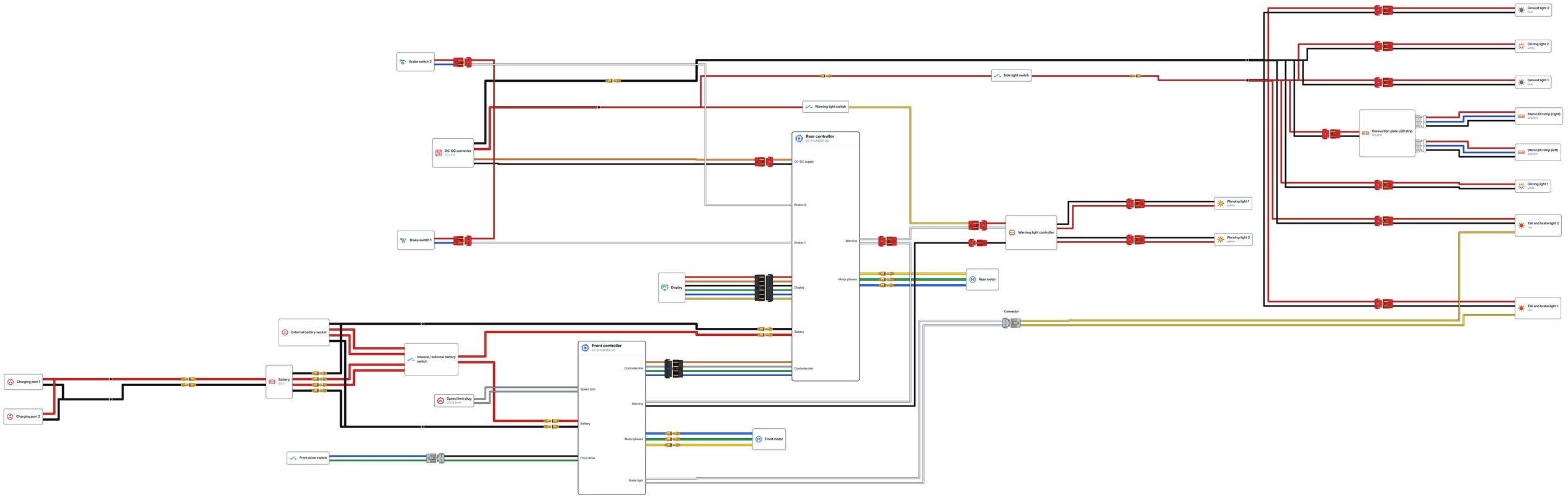
WIRING DIAGRAM

Dualtron Thunder | 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 internal / external battery switch selects the battery feeding both controllers, the 60 V battery or an external battery plugged into the 4-hole external battery socket.
2. The DC-DC converter +12 V is shared out by a grey Y plug. On one side are the converter wire and those of the warning light switch and both brake switches, on the other side the side light switch wire.
3. Two pins of the warning light controller are only marked SC and JS on the original. JS is wired to the warning light switch, SC to a white wire from the rear controller.
4. The GND wire of the warning light controller goes through a 2-pin plug where only pin 1 is wired.
5. On the original, the connection panel is also named bus LED controller. Both pole strips plug into its two headers. It also shows a part marked "IR".
6. A single "left / right" label covers both brake switches on the original, without saying which one is on the left.
7. The original diagram shows no throttle.

DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON Thunder" dated 10 December 2022.

Redrawn by FOHZShop on 1 November 2026.

Disconnect the battery before any work.

CONNECTOR PINOUT

Connector	To	Wire
Front controller Motor phases	**Front motor** Connectors: Bullet connectors	Blue · Motor phase Green · Motor phase Yellow · Motor phase
Front controller Controller link	**Rear controller** Controller link Connectors: JST SM plug	1 · Orange 2 · Grey 3 · Green 4 · Blue
Front controller Warning	**Rear controller** Warning Connectors: JST SM plug	→ 2 · White
Rear controller Motor phases	**Rear motor** Connectors: Bullet connectors	Yellow · Motor phase Green · Motor phase Blue · Motor phase
Rear controller DC-DC supply	**DC-DC converter** Input Connectors: JST SM plug	2 · Orange · IN+ 1 · Black · IN−
Rear controller Warning	**Warning light controller** SC / JS Connectors: JST SM plug / JST SM plug	1 → 2 · White · SC
Battery Output	**Internal / external battery switch** Input 1 Connectors: Bullet connectors	Red · Battery + Red · Battery +
Battery Output	**Splice** Connectors: Bullet connectors	Black · Battery −
Battery Output	**Splice** Connectors: Bullet connectors	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 −
Internal / external battery switch Output	**Front controller** Battery Connectors: Bullet connectors	Red · Battery +
Internal / external battery switch Output	**Rear controller** Battery Connectors: Bullet connectors	Red · Battery +
Internal / external battery switch Input 2	**External battery socket**	→ 1 · Red · Battery + → 2 · Red · Battery +
Splice	**External battery socket**	→ 4 · Black · Battery −
Splice	**Front controller** Battery − Connectors: Bullet connectors	Black · Battery −
Splice	**External battery socket**	→ 3 · Black · Battery −
Splice Connectors: Bullet connectors	**Rear controller** Battery − Connectors: Bullet connectors	Black · Battery −
Display	**Rear controller** Display Connectors: JST SM plug	→ 6 · Red → 5 · Orange → 4 · Black → 3 · Green → 2 · Blue → 1 · Yellow
Speed limit plug	**Front controller** Speed limit	Grey Grey
Front drive switch	**Front controller** Front drive Connectors: JST SM plug	Blue, then black after the connector Green
Brake switch 1	**Splice** Connectors: JST SM plug	1 · Red
Brake switch 1	**Rear controller** Brakes 1 Connectors: JST SM plug	2 · Blue, then white after the connector
Brake switch 2	**Splice** Connectors: JST SM plug	1 · Red
Brake switch 2	**Rear controller** Brakes 2 Connectors: JST SM plug	2 · Blue, then white after the connector
DC-DC converter Output	**Splice**	Red · +12 V
DC-DC converter Output	**Splice** Connectors: Bullet connectors	Black · Ground
Splice	**Side light switch** Connectors: Bullet connectors	Red
Splice	**Warning light switch**	Red
Warning light switch	**Warning light controller** SC / JS Connectors: JST SM plug	→ 1 · Yellow, then red after the connector · JS
Warning light controller GND	**Front controller** Warning Connectors: JST SM plug	1 · Black · Ground
Warning light controller LR	**Warning light 1** Connectors: JST SM plug	1 · Black · LED − 2 · Red · LED +
Warning light controller LR	**Warning light 2** Connectors: JST SM plug	1 · Black · LED − 2 · Red · LED +
Splice	**Side light switch** Connectors: Bullet connectors	Red
Ground light 1	**Splice** Connectors: JST SM plug	2 · Red 1 · Black
Ground light 2	**Splice** Connectors: JST SM plug	2 · Red 1 · Black
Driving light 1	**Splice** Connectors: JST SM plug	2 · Red 1 · Black
Driving light 2	**Splice** Connectors: JST SM plug	2 · Red 1 · Black
Tail and brake light 1 Brake light	**Splice** Connectors: JST SM plug	2 · Red 1 · Black
Tail and brake light 1	**Connector**	Yellow
Tail and brake light 2 Brake light	**Splice** Connectors: JST SM plug	2 · Red 1 · Black
Tail and brake light 2	**Connector**	Yellow
Connector	**Front controller** Brake light	White White
Connection plate LED strip Power	**Splice** Connectors: JST SM plug	2 · Red · +12 V 1 · Black · Ground
Connection plate LED strip RGB output 1	**Stem LED strip (right)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground
Connection plate LED strip RGB output 2	**Stem LED strip (left)** Connectors: Board header	Red · +12 V Blue · LED data Black · Ground