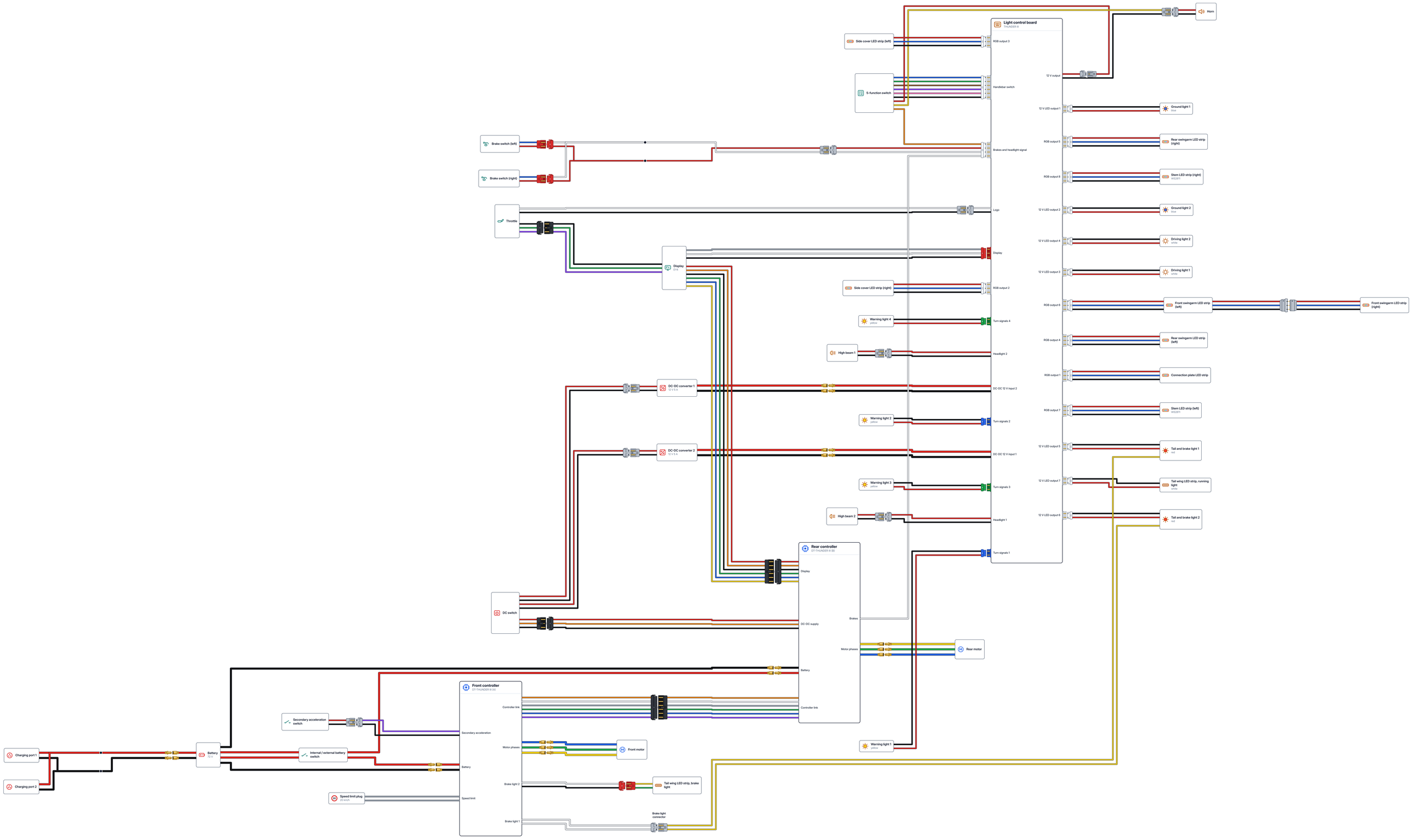
WIRING DIAGRAM

# Dualtron Thunder 3 | 72 V

FOHZSHOP.FR




## WIRE COLOURS

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

## CONNECTORS

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

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

## NOTES

1. The internal / external battery switch selects the battery feeding both controllers. The external battery connection is not shown on the original diagram.
2. The RGB strips are addressable LEDs with three wires: supply (V+), data (D0) and ground (V-).
3. Both brake switches are wired in parallel to the light board, which passes the brake signal to the rear controller. The brake lights (yellow wire of the tail lights and the tail-wing strip) are wired to the front controller.
4. On the original diagram, the LEDs of the tail-wing brake strip are marked "white", like those of the running-light strip.

## DOCUMENT

Based on the manufacturer diagram "Schéma électrique DUALTRON Thunder 3" dated 3 March 2023.

Redrawn by FOHZShop on 31 October 2026.

**Disconnect the battery before any work.**

## CONNECTOR PINOUT

| Connector | To | Wire |
|---|---|---|
| **Front controller**<br>Motor phases | **Front motor**<br>Connectors: Bullet connectors | Blue · Motor phase<br>Green · Motor phase<br>Yellow · Motor phase |
| **Front controller**<br>Controller link | **Rear controller**<br>Controller link<br>Connectors: JST SM plug | Orange<br>White<br>Grey<br>Green<br>Blue<br>Violet |
| **Rear controller**<br>Motor phases | **Rear motor**<br>Connectors: Bullet connectors | Yellow · Motor phase<br>Green · Motor phase<br>Blue · Motor phase |
| **Rear controller**<br>DC-DC supply | **DC switch**<br>Input<br>Connectors: JST SM plug | Red<br>Orange<br>Black |
| **Light control board**<br>Logo | **Throttle**<br>Logo<br>Connectors: JST SM plug | White<br>Black |
| **Light control board**<br>Brakes and headlight signal | **Rear controller**<br>Brakes<br>Connectors: Board header | White · Brake signal |
| **Light control board**<br>Headlight 1 | **High beam 2**<br>Connectors: JST SM plug | Red · LED +<br>Black · LED – |
| **Light control board**<br>Headlight 2 | **High beam 1**<br>Connectors: JST SM plug | Red · LED +<br>Black · LED – |
| **Light control board**<br>RGB output 1 | **Connection plate LED strip**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Light control board**<br>RGB output 2 | **Side cover LED strip (right)**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Light control board**<br>RGB output 3 | **Side cover LED strip (left)**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Light control board**<br>RGB output 4 | **Rear swingarm LED strip (left)**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Light control board**<br>RGB output 5 | **Rear swingarm LED strip (right)**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Light control board**<br>RGB output 6 | **Front swingarm LED strip (left)**<br>Connectors: Board header | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Light control board**<br>RGB output 7 | **Stem LED strip (left)**<br>Connectors: Board header | Red · +12 V<br>Blue · LED data<br>Black · Ground |
| **Light control board**<br>RGB output 8 | **Stem LED strip (right)**<br>Connectors: Board header | Red · +12 V<br>Blue · LED data<br>Black · Ground |
| **Light control board**<br>Turn signals 1 | **Warning light 1**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>Turn signals 2 | **Warning light 2**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>Turn signals 3 | **Warning light 3**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>Turn signals 4 | **Warning light 4**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 1 | **Ground light 1**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 2 | **Ground light 2**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 3 | **Driving light 1**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 4 | **Driving light 2**<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 5 | **Tail and brake light 1**<br>Running light<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 6 | **Tail and brake light 2**<br>Running light<br>Connectors: Board header | Black · LED –<br>Red · LED + |
| **Light control board**<br>12 V LED output 7 | **Tail wing LED strip, running light**<br>Connectors: Board header | Black · Ground<br>Red · +12 V |
| **Battery**<br>Output | **Internal / external battery switch**<br>Input | Red · Battery +<br>Red · Battery + |
| **Battery**<br>Output | **Front controller**<br>Battery<br>Connectors: Bullet connectors | Black · Battery – |
| **Battery**<br>Output | **Rear controller**<br>Battery<br>Connectors: Bullet connectors | Black · Battery – |
| **Charging port 1** | **Splice** | Red · Charge +<br>Black · Charge – |
| **Charging port 2** | **Splice** | Red · Charge +<br>Black · Charge – |
| **Splice** | **Battery**<br>Charge<br>Connectors: Bullet connectors | Red · Charge +<br>Black · Charge – |
| **Internal / external battery switch**<br>Output | **Front controller**<br>Battery<br>Connectors: Bullet connectors | Red · Battery + |
| **Internal / external battery switch**<br>Output | **Rear controller**<br>Battery<br>Connectors: Bullet connectors | Red · Battery + |
| **Display**<br>Controller | **Rear controller**<br>Display<br>Connectors: JST SM plug | Red<br>Orange<br>Black<br>Green<br>Blue<br>Yellow |
| **Display**<br>Light board | **Light control board**<br>Display<br>Connectors: Board header | Grey<br>White<br>Black |
| **Throttle** | **Display**<br>Throttle<br>Connectors: JST SM plug | Black<br>Green<br>Violet |
| **5-function switch** | **Light control board**<br>Handlebar switch<br>Connectors: Board header | Blue<br>Green<br>Brown<br>Violet<br>Pink<br>Black |
| **5-function switch** | **Light control board**<br>Brakes and headlight signal<br>Connectors: Board header | Orange · Headlight control |
| **5-function switch** | **Light control board**<br>12 V output<br>Connectors: JST SM plug | Red · +12 V |
| **Brake switch (left)** | **Splice**<br>Connectors: JST SM plug | Blue, then white after the connector · Brake signal<br>Red · +12 V |
| **Brake switch (right)** | **Splice**<br>Connectors: JST SM plug | Blue, then white after the connector · Brake signal<br>Red · +12 V |
| **Splice**<br>Brakes and headlight signal<br>Connectors: JST SM plug / Board header | **Light control board** | Red · +12 V<br>White · Brake signal |
| **Speed limit plug** | **Front controller**<br>Speed limit | Grey<br>Grey |
| **Secondary acceleration switch** | **Front controller**<br>Secondary acceleration<br>Connectors: JST SM plug | Red, then violet after the connector<br>Black |
| **DC switch**<br>Output | **DC-DC converter 1**<br>Input<br>Connectors: JST SM plug | Red · IN+<br>Black · IN– |
| **DC switch**<br>Output | **DC-DC converter 2**<br>Input<br>Connectors: JST SM plug | Red · IN+<br>Black · IN– |
| **DC-DC converter 1**<br>Output | **Light control board**<br>DC-DC 12 V input 2<br>Connectors: Bullet connectors | Red · +12 V<br>Black · Ground |
| **DC-DC converter 2**<br>Output | **Light control board**<br>DC-DC 12 V input 1<br>Connectors: Bullet connectors | Red · +12 V<br>Black · Ground |
| **Horn** | **5-function switch**<br>Connectors: JST SM plug | Red, then yellow after the connector · Horn |
| **Horn** | **Light control board**<br>12 V output<br>Connectors: JST SM plug | Black · Ground |
| **Tail and brake light 1**<br>Brake light | **Brake light connector** | Yellow · Brake light |
| **Tail and brake light 2**<br>Brake light | **Brake light connector** | Yellow · Brake light |
| **Brake light connector** | **Front controller**<br>Brake light 1 | White · Brake light<br>White · Brake light |
| **Front swingarm LED strip (left)** | **Front swingarm LED strip (right)**<br>Connectors: Round waterproof plug | Red · LED +<br>Blue · LED data<br>Black · LED – |
| **Tail wing LED strip, brake light** | **Front controller**<br>Brake light 2<br>Connectors: JST SM plug | Yellow, then white after the connector · Brake light<br>Green, then black after the connector · Ground |